

Official Document
of the
Pan American Health Organization
No. 148

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INDEXED

PROPOSED PROGRAM AND BUDGET ESTIMATES

PAN AMERICAN HEALTH ORGANIZATION, 1978
WORLD HEALTH ORGANIZATION, REGION OF THE AMERICAS, 1979
PAN AMERICAN HEALTH ORGANIZATION, PROVISIONAL DRAFT, 1979



PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the
WORLD HEALTH ORGANIZATION
April 1977

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PAN AMERICAN HEALTH ORGANIZATION
Pan American Sanitary Bureau, Regional Office of the
WORLD HEALTH ORGANIZATION
525 23rd St., N.W.
Washington, D.C. 20037, U.S.A.


ABBREVIATIONS

AID	Agency for International Development
AIDIS	American Association of Sanitary Engineering
AMRO	Regional Office for the Americas (regional abbreviation for intercountry and interarea projects)
BIREME	Regional Library of Medicine and the Health Sciences
CAREC	Caribbean Epidemiology Center
CELADE	Latin American Demographic Center
CEPANZO	Pan American Zoonoses Center
CEPIS	Pan American Center for Sanitary Engineering and Environmental Sciences
CFNI	Caribbean Food and Nutrition Institute
CIDA	Canadian International Development Agency
ECLA	Economic Commission for Latin America
FAO	Food and Agriculture Organization
IAEA	International Atomic Energy Agency
IBRD	International Bank for Reconstruction and Development
IDB	Inter-American Development Bank
ILO	International Labour Organization
INCAP	Institute of Nutrition of Central America and Panama
OAS	Organization of American States
PAHEF	Pan American Health and Education Foundation
PAHO	Pan American Health Organization
PANAFTOSA	Pan American Foot-and-Mouth Disease Center
PASB	Pan American Sanitary Bureau
UN	United Nations
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNDRO	United Nations Disaster Relief Office
UNEO	United Nations Emergency Organization
UNEP	United Nations Environmental Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations Children's Fund
USPHS/CDC	United States of America Public Health Service/Center for Disease Control
WFP	World Food Programme
WHO	World Health Organization

LETTER OF TRANSMITTAL

The Director of the Pan American Sanitary Bureau, Regional Office of the World Health Organization, has the honor to present the following proposed program and budget estimates for consideration:

1. The proposed program and budget estimates of the Pan American Health Organization for the financial year 1978.
2. The proposed program and budget estimates of the World Health Organization for the Region of the Americas for the financial year 1979.
3. The provisional draft of the proposed program and budget estimates of the Pan American Health Organization for the financial year 1979.


Héctor R. Acuña
Director

THE PAHO TECHNICAL COOPERATION PROGRAM

Technical cooperation may be defined as the joint effort of the Pan American Health Organization (PAHO) with the Member Governments to achieve their national goals and to contribute significantly to the improvement of the health status of their populations. It requires a partnership, which implies that technical cooperation activities undertaken at the request of Member States are relevant to the needs of the countries as determined by their governments, and are aimed at developing national capabilities and promoting self-reliance and self-sufficiency in the health field. Technical cooperation also involves the adaptation or development of technology which is geared to their own social, economic and cultural characteristics and which they can apply at a cost they can afford.

Implicit in technical cooperation is the technical leadership role of the Organization in assisting governments to combat disease, lengthen life, and promote physical and mental health. PAHO also plays a coordinating role in assisting countries to provide their populations with the necessary medical and health services for achieving these goals.

Essential to the joint technical cooperation effort are the projects carried out within countries at the request of governments. These projects may be suggested by the Member Governments or by PAHO but are always intended to respond to a need identified by the governments. Country projects are initiated only upon a specific request made by a government.

Supporting the country projects are a variety of intercountry and regional projects and activities, each of which responds to a request from a group of countries or to a resolution adopted by one or more of PAHO's Governing Bodies: the Pan American Sanitary Conference, the Directing Council and the Executive Committee. In order to carry out country projects, intercountry and regional projects, the Organization has a full-time professional representative in most of the countries. This Country Representative is supported by a group of well-qualified Area Advisors, by the several specialized Centers, and by the professional staff of the Headquarters Office.

Technical cooperation activities are generally carried out through a series of program elements. Essentially these elements consist of assignment of full-time professional advisors working and living in the host country; short-term consultants; award of training fellowships for training outside the country; sponsorship of seminars, short courses and workshops for in-country short-term training; small grants; and supplies and equipment in limited quantities, when necessary, for the success of specific projects.

The Organization carries out projects jointly with governments, financed by the regular budgets of PAHO and WHO. It acts as the executing agency for programs and projects funded by UNDP and UNFPA, as well as by the bilateral program agencies of several donor countries and by certain foundations interested in public health. It renders services in connection with projects financed by loans from IBRD and IDB, and works closely with the WFP. In addition, it collaborates with UNICEF and provides technical services for UNICEF-funded programs.

POLICY

In orienting the PAHO Technical Cooperation Program, due regard has been given to the Ten-Year Health Plan for the Americas, the Sixth General Program of Work of WHO, the contribution of the Region of the Americas to that Program, resolutions of the PAHO Governing Bodies, and the national health plans of the Member Governments.

The Ten-Year Health Plan for the Americas defines the health goals of the Hemisphere as a whole for the decade of the 1970's and spells out the strategies for achieving them. The Sixth General Program of Work of WHO, adopted by the Twenty-Ninth World Health Assembly, represents the medium-term plan for cooperation for the years 1978-1983. The contribution of the Region of the Americas to the Sixth General Program of Work was adopted by the XXIII Meeting of the PAHO Directing Council, and constitutes the medium-term plan of PAHO for the same period. The resolutions of the Governing Bodies delineate policy on administrative and technical aspects of the Organization's program. These resolutions constitute commitments regarding financial and program matters and reflect the changing needs of the countries. Thus the PAHO Technical Cooperation Program is the result of a continuous and productive interaction between the governments and the Organization.

PROGRAM APPROACHES: ACTIVITIES AND METHODS

For the implementation of the Program, a variety of approaches, activities and methods is available.

Of primary importance are the development and adaptation of technology. It is important that the Organization assist governments to develop their own technology or, in some cases, to adapt it to their own needs. Adoption of technology which has been successful in the more industrialized countries does not ensure success and may often be counterproductive. Development or adaptation of technology may be more difficult and requires the exercise of greater knowledge of local conditions, but it is far more effective in solving prevailing problems. Collaboration in research, especially of an operational nature, and joint participation in pilot projects are an important part of this approach. Scientific support will become more important as national research efforts expand.

The dissemination and exchange of health-related scientific information is of fundamental importance. This includes the publication of books and journals as well as information transmitted through seminars, workshops and conferences and by other means. The formulation of norms and standards for public health programs is also important. In this way, techniques and methods used in one country may be made available for the use of others.

Promotional approaches include collaboration in the formulation of national health plans, support in identifying health problems and needs, including situational analysis, epidemiological and statistical surveys, pre-investment studies, introduction of new country programming processes, and development of new methods of problem-solving. Improved ways must be found to enlist greater community participation in the development of local health programs through integrated approaches to individual and general health education.

Operational collaboration includes the provision of specialized knowledge that complements and catalyzes national efforts and capacity through long- and short-term consultants. Education and training of human resources is another well-established approach and includes the development of national health personnel in accordance with the priorities and requirements of the countries, the provision of fellowships, the sponsoring of courses and seminars, and direct assistance to educational institutions. Technical support is available in such fields as the introduction of laboratory techniques, quality control of drugs, environmental monitoring, and the design of health facilities.

Coordination includes cooperation with the countries in the establishment of mechanisms within the health sector for cooperative activities with other sectors, as well as support for ministries of health on request in strengthening their participation in such national development activities as urban planning, housing, agricultural and industrial development, educational planning and social welfare. Collaboration with other organizations and institutions at the country level for the purpose of focusing their attention and channeling their resources into health programs is of great importance. The Organization also collaborates with other agencies of the UN and Inter-American System that are concerned with sectors that influence and affect health, such as agriculture, food supply, education and community development.

It is important for PAHO to assist Member Governments to identify and mobilize external resources which can contribute to the attainment of country health objectives. Resources, financial and otherwise, are available through bilateral assistance agencies, international banks and foundations to assist in this effort. Currently a significant percentage of funds available to the Organization come from these "extrabudgetary" sources and this percentage, hopefully, will be increased in the future. Once the possible sources of extrabudgetary resources are identified, the Organization may serve a useful role by assisting in the preparation of grant requests or loan applications, which often require highly technical knowledge and a familiarity with the priorities and procedures of the donor agencies.

ORGANIZATION

The point of delivery of the Organization's services to countries is within each individual country. Among the major objectives of the recent restructuring, therefore, are to strengthen the staff within the countries and to provide them with greater operational flexibility so that they might respond more readily and rapidly to the changing requirements of the governments.

The PAHO staff in each country is headed by a Country Representative. This official represents the Director within the country, and has recently received a broader delegation of authority. Within general guidelines the Country Representative may agree on the planning and carrying out of programs jointly with the Ministry of Health.

The Organization's Area Representatives, serve also as Country Representatives in their headquarters country. Their main responsibilities include day-to-day contacts with the several subregional health groupings (Central America, Caribbean area, Andean Region, and the Rio de la Plata Basin). They are also responsible for coordinating the activities carried out by the advisors assigned to the area under their jurisdiction, as well as for implementing the resolutions of the subregional groups.

The Headquarters Office in Washington is organized into six Technical Divisions and an Office of Administration. The Technical Divisions are: the Division of Disease Control (prevention or control of disease and disability); the Division of Environmental Health (control of environmental factors affecting health); the Division of Family Health (promotion of family health and well-being); the Division of Human Resources and Research (development of human resources and promotion of research, as well as complementary technological, material and financial resources); the Division of Health Services (promotion and organization of the necessary infrastructure for delivering health services, including intersectoral coordination); the Division of Supporting Services (provision of basic statistical data for planning, management and evaluation). The Office of Administration is responsible for accounting, budgeting, personnel, conference and general services.

The Divisions are also responsible for the specialized Centers that provide technical guidance in carrying out activities relevant to the Program.

To ensure interdivisional coordination, the Headquarters Program Committee (HPC), composed of the Chiefs of Division and the Chief of Administration, has been established under the chairmanship of the Deputy Director. The Assistant Director is also a member and serves as Secretary. Its terms of reference are to prepare and recommend programs to the Director and to coordinate all the technical units within the Headquarters Office, with a view to long-term planning. Within each Division, there is a Headquarters Program Subcommittee (HPS) in which each of the other Divisions is represented. These Subcommittees study specific program areas at the request of the HPC and on their own initiative. Because of their multidivisional and multidisciplinary nature, they serve as a further mechanism for communication and coordination across organizational and professional lines.

* * * * *

EXTENSION OF HEALTH SERVICES

To illustrate how some of the approaches mentioned may be applied in a specific program and how they are firmly integrated with the new concept of technical cooperation and organizational structure described, an example is set forth below regarding how the inputs and resources of the various organizational units are made available for the Extension of Health Service Coverage - the central objective of both the Ten-Year Health Plan for the Americas of PAHO and the Sixth General Program of Work of WHO.

Program Areas

I. Prevention or control of disease and disability through services to individuals

Activities included:

The three basic areas for early development of health services in the Americas are immunization, epidemiological surveillance and control of zoonoses. In these three areas services are available to governments in the formulation of guidelines for program development, technical cooperation upon the occurrence of epidemics and collaboration with governments in obtaining financial resources from bilateral and multilateral agencies.

Resources and inputs available

1. Headquarters Office (Division of Disease Control)

It formulates standards, norms and guidelines, and programs. Technical cooperation expertise is available in the following fields:

- Development of immunization programs
- Production, quality control, transport and storage of vaccines
- Implementation of epidemiological surveillance systems
- Cooperation upon the occurrence of epidemics
- Eradication and control of zoonoses

2. Area

Resources are available in the fields of:

- Development of immunization programs
- Production, quality control, transport and storage of vaccines
- Implementation of epidemiological surveillance systems
- Cooperation upon the occurrence of epidemics
- Eradication and control of zoonoses
- Veterinary public health
- Training of personnel

3. Country

Resources are available in the following fields:

- Development of immunization programs
- Production, quality control, transport and storage of vaccines
- Eradication and control of zoonoses
- Veterinary public health
- Training of local personnel

4. Centers

Pan American Zoonoses Center

Resources are available in the following fields:

- Epidemiological surveillance of animal diseases
- Zoonoses control
- Laboratories for diagnosis and reference with regard to zoonoses
- Development of zoonoses control and eradication programs
- Development of methodologies for zoonoses control
- Vaccine and antigen quality control

Training activities are available in the following areas:

- Methods of diagnosis
- Planning
- Program management
- Epidemiology, virology, and immunology
- Food hygiene
- Development of manuals for field operations

Pan American Foot-and-Mouth Disease Center

Resources are available in the following disciplines:

- Epidemiological surveillance of vesicular diseases
- Control and prevention of foot-and-mouth disease
- Laboratories for diagnosis and reference with regard to vesicular diseases
- Development of national programs for control and prevention of foot-and-mouth disease
- Epidemiological research
- Development of new techniques for production and quality control of foot-and-mouth disease vaccines

Training activities are available in the following fields:

- Industrial production of foot-and-mouth disease vaccines
- Methods of diagnosis
- Epidemiology of foot-and-mouth disease and other vesicular diseases
- Virology and immunology
- Development of manuals for field operations

Caribbean Epidemiology Center

Resources are available in the following areas:

- Epidemiological surveillance of communicable diseases
- Disease control
- Laboratories for diagnosis of communicable diseases
- Epidemiology of chronic diseases
- Quality control tests of vaccines

II. Control of environmental factors affecting health

Activities included:

Program activities in support of the extension of health services include those related to community sanitation (water supply and excreta disposal); solid waste management; housing; food sanitation and environmental pollution control.

Resources and inputs available

1. Headquarters Office (Division of Environmental Health)

It develops norms, guidelines, methods and procedures. It collaborates with governments in obtaining external financial resources. Expertise is available in all areas of environmental health including:

- Water supply and waste water disposal
- Institutional development
- Pollution control
- Radiological protection and hazards
- Research

2. Area

Resources are available in the following fields:

- Water and sewerage systems
- Solid waste management and pollution control

3. Country

Resources are available in the following disciplines:

- Basic sanitation
- Water and sewerage systems
- Environmental pollution
- Institutional development

4. Centers

Pan American Center for Sanitary Engineering

Resources are available in the following areas:

- Air pollution
- Housing and physical planning
- Individual hygiene
- Systems analysis and computer sciences
- Water quality and water resource development
- Water chemistry
- Water treatment
- Waste water treatment

Training and information exchange is available in the areas listed above.

Pan American Center for Human Ecology and Health

Resources are available in the following fields:

- Assessment of health and ecological implications of development projects
- Formulation of environmental health criteria and guidelines for use in developing standards
- Development of educational and training programs in human ecology and health
- Dissemination of information related to program activities

III. Promotion of family health and well-being

Activities included:

Vital components of a health service program are satisfaction of the essential nutritional requirements of mothers and children, ensuring that all births take place in an hygienic environment; provision of a minimum of supervision for pregnant women and growing children so that early signs of disease can be detected and appropriate care given; and, to this end, modification of the health behavior of the individual and the community.

Resources and inputs available

1. Headquarters Office (Division of Family Health)

It formulates standards, methods and procedures. It collaborates with governments in obtaining external financial resources. Expertise is available in the following fields:

- Maternal and child health/family planning
- Nutrition
- Dental health
- Mental health
- Program development and evaluation
- Family life and health education
- Fluoridation
- Nursing/midwifery

2. Area

Resources are available in the fields of:

- Maternal and child health
- Nutrition
- Family life
- Education
- Nursing/midwifery

3. Country

Technical staff with a specialized background or training in:

- Maternal and child health/family planning
- Nutrition
- Mental health

4. Centers

Latin American Center for Perinatology and Human Development

Resources are available in the area of perinatology.

Training activities are available in the same field.

Institute of Nutrition of Central America and Panama

Resources are available in the following disciplines:

- Nutrition
- Nutrition policy
- Agricultural economics
- Maternal and child health
- Community development

Training is available in the areas of:

- Nutrition
- Metabolism
- General public health
- Maternal and child health

Caribbean Food and Nutrition Institute

Resources are available in the following fields:

- Nutrition
- Nutrition policy
- Dietetics
- Hospital dietetics
- Food services

Training is available in the above-mentioned fields.

IV. Development of human resources and promotion of research as well as complementary technological material

Activities included:

With a view toward improving health manpower and coordinating and developing medical research, activities are grouped in the following four program areas: (a) planning, including manpower planning; (b) training, comprising development of "large-scale training systems", development of educational institutions, promotion, organization and conduct of training courses for personnel of all categories and all levels, coordination and development of continuing education, and training of teachers and researchers; (c) research, including coordination and development of socioepidemiological and operational research; (d) technological resources, which cover educational development and applied technology, improvement of libraries and scientific information systems, and distribution of low-cost textbooks, basic diagnostic equipment and instructional materials.

Resources and inputs available

1. Headquarters Office (Division of Human Resources and Research)

It collaborates in obtaining external financial resources. It formulates standards, methods and procedures for programming at the country level and makes available expertise in the following fields:

- Public health, epidemiology and administration
- General and community medicine education
- Nursing education
- Environmental sciences education
- Health manpower planning
- Research coordination and development
- Educational technology

2. Area

Special fields and disciplines include:

- Human resources planning
- Development of the teaching and learning processes
- Educational technology
- Research

3. Country

Resources may vary from country to country, covering, where appropriate, the following fields:

- Medicine
- Public health
- Nursing
- Environmental health
- Dentistry
- General development of educational technology

4. Centers

Regional Library of Medicine

Resources and specialists in library and biomedical information systems

Latin American Center for Educational Technology in Health, Rio de Janeiro

Resources for the preparation of instructional materials and personnel training in:

- Medicine
- Nursing
- Administration
- Educational psychology
- Computer analysis and programming

V. Promotion and organization of the necessary infrastructure for delivering health services, including intersectoral coordination

Activities included:

The expansion of health service coverage of underserved populations requires the provision of technical guidance and support to programs designed to strengthen and consolidate health systems, including health care and community participation services. Efforts should be directed towards assisting countries in organizing their internal resources and meeting their health needs. Local efforts should be integrated with the national health system and receive appropriate technical supervision and logistic support from it.

Resources and inputs available

1. Headquarters Office (Division of Health Services)

It establishes technical and program standards. Collaborates in obtaining external financial resources, determines methods and makes available the following special skills:

- Planning and programming of health systems
- Development of administrative infrastructure
- Health care and administration of medical services
- Administration of health care facilities (hospital and other)
- Medical rehabilitation
- Maintenance of health care facilities and biomedical engineering
- Study and design of health facilities and equipment
- Health economics (financial aspects)
- Information systems
- Systems analysis
- Community organization

2. Area

Resources are available in the following specialities:

- Health planning and evaluation
- Management and administrative procedures
- Nursing services
- Medical care and hospital administration

3. Country

Resources are available in the following fields:

- Health administration
- Health planning and evaluation
- Medical care and hospital administration
- Management and administrative procedures
- Nursing services

VI. Provision of statistical data required for planning, management, and evaluation of health service programs

Activities included:

Provision of data on birth, death and morbidity rates, immunization, utilization of services, patient records and other health related activities.

Resources and inputs available

1. Headquarters Office (Division of Supporting Services)

It formulates standards, methods and procedures and makes available to countries expertise in collecting data necessary for extension of health services programs.

2. Area

Resources are available in the field of statistics

3. Country

Resources are available in the area of:

- Statistics
- Medical records

METHOD OF PREPARATION

The program and budget document of the Pan American Health Organization (PAHO) and the World Health Organization (WHO) in the Americas is based on the Ten-Year Health Plan, 1971-1980,* in which a new operational nomenclature was approved. In it, problems directly related to the health situation are included under the category "Program of Services," which includes maternal and child health and family welfare, nutrition, communicable and noncommunicable diseases, and all programs related to the environment, as well as complementary services, such as nursing, laboratories, rehabilitation, and epidemiological surveillance. The second category, "Development of the Infrastructure," includes national health systems, development of human resources, physical, financial, and technological resources, and research coordination.

The program and budget has been developed in consultation with the national health authorities, in order to provide technical information, advice, and services to Member Governments within the approved policies and long-range programs of the Organization. Special attention has been given to the fundamental importance of health in relation to social and economic development, and to the formulation of health plans as an integral part of the national plans for development. Flexibility is maintained to meet changing requirements of the governments arising from redefinition of program objectives as national plans are developed.

Although not always completely reflected in this document, a significant amount of the time and energy of the Organization is devoted to cooperation with other international agencies, governments, and foundations in planning health programs to be financed by them, especially through loans for water supply systems, grants for research, education and training, and special programs in nutrition, in control and eradication of specific diseases, and in community development and hospital maintenance. It should be noted that these sources comprise 28.2% of the total program and budget in 1978.

The program is presented covering the budget for the current year, 1977, the proposal for 1978, and the provisional draft for 1979. The proposal has been planned as a balanced whole, regardless of the source of funds. The information for 1977 includes the latest data available at the time of preparation of this document. The budget for the current year, 1977, and the proposals for 1978 and 1979 were formally reviewed with the Member Governments during the latter half of 1976. Up until the date the document was sent to print, the budget was being revised to reflect current priorities and the latest known desires and requirements of the governments. The proposals for 1978 will again be reviewed with the governments later this year, as will those for 1979 and 1980. Therefore, the program and budget is a dynamic document, which, of necessity, changes within the rules and regulations of the Organization to reflect the current situation.

The various sources of funds expected to be available to the Organization in 1978 are as follows:

1. The Regular Budget of PAHO, amounting to US\$31,177,890, including US\$525,000 in miscellaneous income.
2. Other funds expected to be available to PAHO for specific purposes: (a) special funds from voluntary contributions; (b) special grants to PAHO for specific activities; and (c) quota payments by Member Countries of the Institute of Nutrition of Central America and Panama (INCAP), as well as grants to INCAP from various sources. Also included are the funds of the Pan American Health and Education Foundation (PAHEF), the PAHO Community Water Supply Fund, and grants and contributions to the Caribbean Epidemiology Center (CAREC).
3. The portion of the Regular Budget of WHO allocated to the Region of the Americas.
4. Funds of the United Nations Development Program (UNDP) administered through WHO for projects in the Region of the Americas. The amounts shown for 1978 represent the program level approved and/or anticipated after taking into account the financial situation of UNDP.
5. Other funds available to the Americas through WHO, including those from the United Nations Fund for Population Activities (UNFPA).

All of the various funds are summarized in Table 1. This table includes only the funds directly administered by PAHO/WHO, although the program is planned with those of other international organizations, government agencies active in technical assistance and research, and private institutions interested in the field of health. Most of the funds of these entities are administered by them and are not reflected in this document.

Projects requested which could not be fitted into the budget of the Organization are shown in Annex 4 and amount to almost US\$4,500,000.

It should be noted that the total budget decreases by 10.8% in 1978, due solely to decreases in the funds available from extra-budgetary sources, such as Grants and Other Contributions, the Community Water Supply Fund, PAHEF, UNFPA, and UNDP. It is probable that these external funds will increase as new activities are planned and approved. For example, external funds were predicted to total 31.6% at the time this document was prepared last year. However, these funds now total 40.8% of the 1977 budget.

The Regular Budget of PAHO shows an increase of 8.0% in 1978 over 1977. This represents a slight reduction from the increase of 8.2% requested for 1977 in the previous Official Document 141. The 8.0% increase for 1978 will only partly compensate for increased costs due to inflation occurring in this Region.

Table 2 shows the programs of the Organization in monetary terms and percentages. Five major program classifications have been established, with further subdivisions into subgroups and specific programs in order to facilitate program analysis. The first two of the major program classifications, Program of Services and Development of the Infrastructure, provide direct assistance to the countries and comprise an average of 86.8% of the total funds available. The three remaining major program classifications, Administrative Direction, Governing Bodies, and Increase to Assets, could logically be attributed to each program. However, they have been kept apart since a separate analysis and review is generally made of each one of them. It is necessary to bear in mind, in the examination of the proposed program and budget, the fact that the categories are complementary rather than mutually exclusive. A full appreciation of any category requires an examination of all related portions of the program and budget.

Table 3 presents a classification according to the types of activities the Organization expects to carry out. Advisory Services refer to all activities devoted to cooperation with governments in planning and executing health programs, including demonstration supplies and equipment. This applies not only to direct health programs, but also to educational institutions. For example, the funds for consultants advising educational institutions, together with teaching supplies and equipment, are shown under Advisory Services, since this is the activity being carried out. This activity represents an average of 56.2% of the total program to be available for technical assistance in the planning and execution of programs, including the expertise provided, as well as the supplies and equipment made available to assist national programs.

Development of Human Resources essentially comprises fellowships, seminars, and courses. Although some consultants providing advisory services often devote a substantial portion of their efforts to training, this time is not shown separately, but rather under Advisory Services. It should be realized, then, that the total training effort is greater than can be reflected in these tables. Following this definition, the development of human resources through fellowships and participation in courses and seminars and other technical meetings requires an average of 19.3% of the total program.

The third activity is Research, which accounts for an average of 7.3% of the program. The remaining heading is Other Program Services, which is separated from the other three but could logically be apportioned to each of them. This activity accounts for an average of 17.2% of the program. It should be noted that this activity appears to increase each year. This is due to the fact that the activity is primarily composed of regular funds rather than external funds. As external funds decrease, this activity seems to increase. However, as additional external funds are received, this activity will decrease. For example, this activity accounted for 17.0% of the budget in 1977 as shown in the previous budget document. The activity in 1977 in this document accounts for 15.5%.

*Ten-Year Health Plan for the Americas, Final Report of the III Special Meeting of Ministers of Health of the Americas, Official Document 118.

With regard to the means to perform these activities, as shown in Table 4, it will be noted that positions are now shown in months in order to more accurately reflect periods of assignment. The number of full-time positions varies from 22,100 months or approximately 1,842 positions in 1977 to 20,711 months or approximately 1,726 positions in 1979. Short-term consultant months vary from 1,527 in 1977 to 797 in 1979. Fellowships vary from 6,669 in 1977 to 4,071 in 1979. The decreases occur in extra-budgetary funds.

Table 5 presents all the funds by source and by object of expenditure, and Table 6 presents the same information by part. Following the tables, there is a narrative for each subject describing the program in the Americas. These include a summary of the problem and its magnitude, the policy and method of approach followed by the Organization, and the activities being carried out and planned for future years. Following each narrative is a summary of the costs and the number of posts, consultants, and fellowships.

As to the method of preparation and computation, all the estimates are expressed in US dollars. The situation as of February 1977 has been used for projecting salaries and common staff costs for all established positions in the budget for the years 1977-1979. Posts are costed for the full year if filled at the time of preparation. Vacant posts are budgeted for eight months.

A simplified system of averages has been used for costing of posts financed from PAHO funds. The averages, including all entitlements, were developed to provide figures for filled or vacant posts by grade. The averages are based on the actual total cost of all posts. These estimated costs of a particular office or project may be slightly above or below the actual costs, depending upon the length of service, number of dependents, and other pertinent cost factors of staff members employed in such projects or offices. This small difference will not affect planning of individual activities or analysis of the budget according to subject groups, since the total budget estimate for personnel costs is the same as under a system of detailed costing. An average system has also been applied to posts funded by WHO. These posts are costed on a uniform system in all Regions, based upon estimates provided by WHO Headquarters. An averaging system has also been applied to short-term consultants and fellowships, based upon actual costs during 1976. Estimates for other elements are based upon program requirements as planned.

Potential savings which may accrue from staff turnover and lapses in refilling vacant posts during the year are not reflected in the budget since any such savings are used for replacement costs, temporary personnel, additional allowances, and other factors for which no provision is made in the budget.

The individual country programs are presented following the major program descriptions.

It should be noted that the budgetary provision for Increase to Assets (Part V) has been reduced in comparison to the previous document. It is conceivable that this part could be further reduced in future years as experience dictates.

Several informational annexes are included at the end of this document. In particular, Annex 5 presents the programs by fund source. This annex is extremely helpful concerning questions of decreases in the overall program and budget, by identifying the exact fund source and program under which decreases are occurring. A new annex is also included which presents the programs of the Organization in the new division structure which reflects the major technical cooperation programs in the areas of Disease Control, Environmental Health, Family Health, Health Services, Human Resources and Research, Supporting Services, and Administration.

An informational table showing the Area Representatives' Offices and the Area Advisors has been placed in each country following the Summary of Investment table. These services are available to the countries upon request. This table reflects what is available to the countries if requested, but the monetary amounts are not included within the country budgets.

PROPOSED APPROPRIATION RESOLUTION FOR THE PAN AMERICAN HEALTH ORGANIZATION - 1978

THE DIRECTING COUNCIL,

RESOLVES:

1. To appropriate for the financial year 1978 an amount of \$36,502,659, as follows:

PART I	PROGRAM OF SERVICES	\$13,311,640
PART II	DEVELOPMENT OF THE INFRASTRUCTURE	11,011,430
PART III	ADMINISTRATIVE DIRECTION	5,693,785
PART IV	GOVERNING BODIES	411,035
PART V	INCREASE TO ASSETS	500,000
PART VI	SPECIAL FUND FOR HEALTH PROMOTION	250,000
Effective Working Budget (Parts I-VI)		\$31,177,890
		=====
PART VII	STAFF ASSESSMENT (Transfer to Tax Equalization Fund)	5,324,769
Total - All Parts		\$36,502,659
		=====

2. That the appropriation shall be financed from:

- a. Assessments in respect to:

Member Governments and Participating Governments assessed under the scale adopted by the Council of the Organization of American States in accordance with Article 60 of the Pan American Sanitary Code or in accordance with Directing Council resolutions

\$35,977,659

- b. Miscellaneous Income

525,000

Total	\$36,502,659
	=====

In establishing the contributions of Member Governments and Participating Governments, their assessments shall be reduced further by the amount standing to their credit in the Tax Equalization Fund, except that credits of those governments who levy taxes on the emoluments received from the Pan American Health Organization by their nationals and residents shall be reduced by the amounts of such tax reimbursements by PAHO.

3. That, in accordance with the Financial Regulations of PAHO, amounts not exceeding the appropriations noted under Paragraph 1 shall be available for the payment of obligations incurred during the period 1 January to 31 December 1978, inclusive. Notwithstanding the provision of this paragraph, obligations during the financial year 1978 shall be limited to the effective working budget, i.e., Parts I-VI.

4. That the Director shall be authorized to transfer credits between parts of the effective working budget, provided that such transfers of credits between parts as are made do not exceed 10% of the part from which the credit is transferred. Transfers of credits between parts of the budget in excess of 10% of the part from which the credit is transferred may be made with the concurrence of the Executive Committee. All transfers of budget credits shall be reported to the Directing Council and/or the Conference.

ASSESSMENTS OF THE MEMBER GOVERNMENTS AND PARTICIPATING GOVERNMENTS OF THE
PAN AMERICAN HEALTH ORGANIZATION

Whereas, Member Governments appearing in the scale adopted by the Council of the Organization of American States are assessed according to the percentages shown in that scale, in compliance with Article 60 of the Pan American Sanitary Code; and

Whereas, other Member Governments and Participating Governments are assessed on the basis of percentages which would be assigned to such countries if they were subject to the OAS scale; now, therefore,

THE DIRECTING COUNCIL,

RESOLVES:

To establish the assessments of the Member Governments and Participating Governments of the Pan American Health Organization for 1978 in accordance with the scale of quotas shown below and in the corresponding amounts.

(1)	(2)	(3)	(4)	(5)	(6)
Country	OAS Scale %	Gross Assessment US\$	Credit from Tax Equalization Fund US\$	Adjustment for Taxes Imposed by Member Governments on Emoluments of PAHO Staff US\$	Net Assessment US\$
Argentina	7.73	2,580,803	381,963	-	2,198,840
Barbados	0.07	23,371	3,459	-	19,912
Bolivia	0.19	63,435	9,389	-	54,046
Brazil	7.31	2,440,578	361,210	-	2,079,368
Chile	1.33	444,045	65,719	-	378,326
Colombia	1.52	507,480	75,107	500	432,873
Costa Rica	0.19	63,435	9,389	-	54,046
Cuba	1.04	347,223	51,390	-	295,833
Dominican Republic	0.19	63,435	9,389	-	54,046
Ecuador	0.19	63,435	9,389	-	54,046
El Salvador	0.19	63,435	9,389	-	54,046
Guatemala	0.28	93,483	13,836	-	79,647
Haiti	0.19	63,435	9,389	-	54,046
Honduras	0.19	63,435	9,389	-	54,046
Jamaica	0.19	63,435	9,389	-	54,046
Mexico	8.17	2,727,705	403,705	-	2,324,000
Nicaragua	0.19	63,435	9,389	-	54,046
Panama	0.19	63,435	9,389	-	54,046
Paraguay	0.19	63,435	9,389	-	54,046
Peru	0.66	220,353	32,613	-	187,740
Trinidad and Tobago	0.19	63,435	9,389	-	54,046
United States of America	66.00	22,035,314	3,261,271	1,950,000	20,724,043
Uruguay	0.57	190,305	28,166	-	162,139
Venezuela	3.04	1,014,960	150,215	2,200	866,945
Subtotal	100.00*	33,386,840	4,941,322	1,952,700	30,398,218
	Equivalent Percentages				
<u>Other Member Governments</u>					
Bahamas	0.06	20,032	2,965	-	17,067
Canada	6.94	2,317,047	342,927	-	1,974,120
Guyana	0.19	63,435	9,389	-	54,046
Surinam	0.12	40,064	5,929	-	34,135
<u>Participating Governments</u>					
France	0.19	63,435	9,389	-	54,046
Kingdom of the Netherlands	0.07	23,371	3,459	-	19,912
United Kingdom	0.19	63,435	9,389	-	54,046
Subtotal		2,590,819	383,447	-	2,207,372
Total Assessments - All Countries		35,977,659	5,324,769	1,952,700	32,605,590

(2) This column includes the OAS percentages adding to 100% and the equivalent percentages applicable to other Member Governments and Participating Governments. The OAS scale minimum assessment is 0.19% or per capita contribution equal to that of the largest contributor, whichever is smaller.

(5) This column includes estimated amounts to be received by the respective Member Governments in 1978 in respect of taxes levied by them on staff members' emoluments received from PAHO, adjusted for any difference between estimate and actual for the second preceding year.

*The OAS percentages have been adjusted to 100% for PAHO membership since the OAS membership includes Grenada at 0.03%.

TABLE 1
ALL FUNDS

Funds	1977		1978		Increase or Decrease 1978 over 1977	1979		Increase or Decrease 1979 over 1978
	Appropriation or Allocation \$	% of Total %	Proposed \$	% of Total %		Provisional Draft \$	% of Total %	
<u>Pan American Health Organization</u>	<u>47,303,663</u>	<u>67.2</u>	<u>41,308,427</u>	<u>65.8</u>	(12.7)	<u>42,387,429</u>	<u>66.3</u>	2.6
Regular ^{a/}	28,868,415	41.0	31,177,890	49.6	8.0	33,672,100	52.6	8.0
Community Water Supply	1,498,025	2.1	270,951	0.4	(81.9)	57,617	0.1	(78.7)
Grants and Other Contributions to PAHO:								
INCAP and Related Grants	2,682,595	3.8	2,825,000	4.5	5.3	2,925,000	4.6	3.5
Grants Related to CAREC	903,771	1.3	608,555	1.0	(32.7)	548,190	0.9	(9.9)
Other Grants and Contributions	9,399,489	13.4	3,178,200	5.1	(66.2)	2,078,204	3.2	(34.6)
Pan American Health and Education Foundation	3,851,368	5.5	3,247,831	5.2	(15.7)	3,106,318	4.9	(4.4)
Natural Disaster Relief Voluntary Fund	100,000	0.1	-	-	(100.0)	-	-	-
<u>World Health Organization</u>	<u>23,098,387</u>	<u>32.8</u>	<u>21,507,259</u>	<u>34.2</u>	(6.9)	<u>21,552,788</u>	<u>33.7</u>	0.2
Regular	12,814,000	18.2	13,969,000	22.2	9.0	15,226,000	23.8	9.0
United Nations Development Program	3,760,287	5.3	2,663,980	4.2	(29.2)	2,973,985	4.7	11.6
United Nations Fund for Population Activities	6,508,463	9.3	4,874,279	7.8	(25.1)	3,352,803	5.2	(31.2)
Grants and Other Contributions to WHO	15,637	*	-	-	(100.0)	-	-	-
TOTAL	70,402,050	100.0	62,815,686	100.0	(10.8)	63,940,217	100.0	1.8
	=====	=====	=====	=====		=====	=====	

*Less than 0.05 percent

^{a/}Effective Working Budget only (Parts I-VI). Does not include amounts for the Tax Equalization Fund.

TABLE 2
PROGRAM BUDGET - TOTAL

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	38,112,766	54.1	32,406,360	51.5	32,467,680	50.8
SERVICES TO INDIVIDUALS	18,648,283	26.5	16,654,381	26.5	15,264,653	24.1
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES	152,850	.2	161,220	.3	169,750	.3
0100 COMMUNICABLE DISEASES	329,431	.5	373,255	.6	412,980	.6
0200 MALARIA	1,895,920	2.7	1,851,385	2.9	1,898,660	3.0
0400 TUBERCULOSIS	189,670	.3	203,635	.3	239,275	.4
0500 LEPROSY	144,878	.2	149,400	.2	158,955	.2
0600 VENEREAL DISEASES	8,900	*	9,500	*	10,350	*
0700 AEDES AEGYPTI-BORNE DISEASES	382,185	.5	402,365	.6	427,375	.7
0800 PARASITIC DISEASES	78,870	.1	90,320	.1	93,580	.1
0900 VECTOR BIOLOGY AND CONTROL	564,335	.8	604,800	1.0	646,750	1.0
1200 OTHER COMMUNICABLE DISEASES	157,260	.2	177,500	.3	196,980	.3
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	7,811,898	11.1	6,333,911	10.2	4,898,841	7.3
1400 NUTRITION	5,959,692	8.5	5,355,172	8.6	5,176,727	8.2
1500 MENTAL HEALTH	274,215	.4	270,878	.4	292,565	.5
1600 DENTAL HEALTH	305,523	.4	341,920	.5	402,175	.6
1700 CHRONIC DISEASES	390,656	.6	329,210	.5	241,090	.4
ENVIRONMENTAL HEALTH SERVICES	14,868,109	21.1	11,683,634	18.6	12,931,102	20.1
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,863,583	4.1	2,570,445	4.2	2,804,553	4.4
2100 WATER SUPPLY AND EXCRETA DISPOSAL	2,348,309	3.3	839,536	1.4	801,162	1.3
2200 SOLID WASTES	59,335	.1	94,200	.1	147,700	.2
2300 ENVIRONMENTAL POLLUTION	817,730	1.2	605,651	1.0	766,235	1.2
2400 PROGRAM PLANNING AND GENERAL ACTIVITIES	8,510	*	7,055	*	8,060	*
2500 RADIATION AND ISOTOPES	12,685	.2	137,300	.2	133,960	.2
2900 REGIONAL DEVELOPMENT	68,450	.1	73,125	.1	81,660	.1
3000 OCCUPATIONAL HEALTH	75,400	.1	23,700	*	27,050	*
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	2,697,622	3.8	1,342,727	2.1	1,346,184	2.1
3200 PROGRAM PLANNING AND GENERAL ACTIVITIES	3,208,225	4.6	2,968,083	4.6	3,057,029	4.8
3300 FOOT-AND-MOUTH DISEASE	1,994,840	2.8	2,134,007	3.4	2,868,609	4.5
3500 ZONOSSES	441,380	.6	296,380	.5	315,820	.5
3600 QUALITY CONTROL OF FOODSTUFFS	122,900	.2	500,960	.8	532,600	.8
3700 PREVENTION OF ACCIDENTS	35,030	*	30,465	*	20,480	*
COMPLEMENTARY SERVICES	4,596,374	6.5	4,068,345	6.4	4,271,925	6.6
4100 NURSING	1,300,619	1.8	1,378,690	2.2	1,527,760	2.4
4200 LABORATORIES	338,342	.5	263,775	.4	287,070	.4
4300 EPIDEMIOLOGICAL SURVEILLANCE	2,490,915	3.5	2,011,796	3.2	2,033,930	3.2
4400 HEALTH EDUCATION	137,855	.2	135,945	.2	150,125	.2
4500 REHABILITATION	328,643	.5	274,140	.4	273,040	.4
II. DEVELOPMENT OF THE INFRASTRUCTURE	24,106,559	34.3	21,873,906	34.8	22,233,582	34.8
HEALTH SYSTEMS	13,163,899	18.7	11,370,080	18.2	12,091,700	19.0
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,670,494	3.8	2,975,430	4.8	3,233,007	5.1
5100 GENERAL PUBLIC HEALTH SYSTEMS	4,541,032	6.3	3,289,608	5.3	3,646,153	5.7
5200 MEDICAL CARE SYSTEMS	1,478,615	2.1	905,775	1.4	892,750	1.4
5300 PLANNING	765,226	1.1	734,747	1.2	707,305	1.1
5400 STATISTICS AND INFORMATION SYSTEMS	2,286,061	3.2	2,406,685	3.8	2,532,360	4.0
5500 MANAGEMENT SYSTEMS	1,422,471	2.0	1,097,835	1.7	1,080,625	1.7
DEVELOPMENT OF HUMAN RESOURCES	4,987,921	7.0	4,916,890	7.7	4,325,070	6.7
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,056,123	2.9	2,005,420	3.2	1,677,780	2.6
6100 PUBLIC HEALTH	451,520	.6	444,175	.7	389,680	.6
6200 MEDICINE	455,855	.6	456,985	.7	496,660	.8
6300 NURSING	411,689	.6	391,070	.6	415,225	.6
6400 ENVIRONMENTAL SCIENCES	251,335	.4	253,295	.4	284,860	.4
6500 VETERINARY MEDICINE	471,310	.7	453,730	.7	401,695	.6
6600 DENTISTRY	446,257	.6	338,885	.5	229,500	.4
6700 BIOSTATISTICS	3,700	*	3,600	*	3,600	*
6900 OTHER	452,132	.6	570,330	.9	426,270	.7
PHYSICAL RESOURCES	868,135	1.3	662,106	1.1	498,835	.8
7300 PRODUCTION OF BIOLOGICALS	535,600	.8	480,011	.8	356,090	.6
7400 MAINTENANCE OF HEALTH CARE FACILITIES	332,535	.5	182,095	.3	142,745	.2
7800 FINANCIAL RESOURCES	69,875	.1	73,955	.1	78,280	.1
TECHNOLOGICAL RESOURCES	4,692,119	6.7	4,510,420	7.2	4,890,357	7.7
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES	107,595	.2	115,115	.2	128,850	.2
8100 TEXTBOOKS AND OTHER TEACHING MATERIALS	1,723,035	2.4	1,945,710	3.1	2,173,455	3.4
8300 MEDICAL TEXTBOOKS	188,000	.3	235,000	.4	292,000	.5
8400 NURSING TEXTBOOKS	58,142	.1	-	-	-	-
8500 OTHER	1,143,277	1.6	899,865	1.3	835,415	1.3
8600 REGIONAL LIBRARIES	1,057,640	1.6	1,158,555	1.8	1,256,970	2.0
8700 EDITORIAL SERVICES	374,430	.5	246,175	.4	203,667	.3
8900 OTHER TECHNOLOGICAL RESOURCES	-	-	-	-	-	-
RESEARCH COORDINATION	324,610	.5	340,455	.5	349,340	.5
III. ADMINISTRATIVE DIRECTION	6,978,905	9.9	7,447,320	12.0	8,092,125	12.6
9100 EXECUTIVE AND TECHNICAL DIRECTION	643,875	.9	755,435	1.2	875,895	1.4
9200 PROGRAM SERVICES	462,870	.7	492,500	.8	523,435	.8
9300 ADMINISTRATIVE SERVICES	3,878,820	5.5	4,155,810	6.7	4,553,470	7.1
9400 GENERAL EXPENSES	1,993,840	2.8	2,044,075	3.3	2,139,325	3.3
IV. GOVERNING BODIES	553,820	.8	588,100	.9	646,830	1.0
V. INCREASE TO ASSETS	650,000	.9	500,000	.8	500,000	.8
GRAND TOTAL	70,402,050	100.0	62,815,686	100.0	63,940,217	100.0

*LESS THAN .05 PERCENT

TABLE 3
PROGRAM BUDGET - DETAIL 1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		38,112,766	26,402,722	6,828,924	4,792,634	88,486
SERVICES TO INDIVIDUALS		18,648,283	11,971,626	3,725,376	2,927,731	23,550
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES		152,850	152,850	-	-	-
0100 COMMUNICABLE DISEASES		329,431	262,975	66,456	-	-
0200 PROGRAM PLANNING AND GENERAL ACTIVITIES		1,895,920	1,626,505	70,170	199,245	-
0400 MALARIA		189,670	155,020	34,650	-	-
0500 TUBERCULOSIS		144,878	131,878	11,500	1,500	-
0600 LEPROSY		8,900	5,400	3,500	-	-
0700 VENEREAL DISEASES		382,185	379,875	2,310	-	-
0800 AEDS AEGYPTI-BORNE DISEASES		78,870	74,250	4,620	-	-
0900 PARASITIC DISEASES		564,335	123,640	-	440,695	-
1200 VECTOR BIOLOGY AND CONTROL		159,260	134,160	17,000	8,100	-
1300 OTHER COMMUNICABLE DISEASES		7,811,898	6,114,978	1,558,274	138,646	-
1400 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE		5,959,692	2,177,796	1,841,251	1,940,645	-
1500 NUTRITION		274,215	204,535	34,180	35,500	-
1600 MENTAL HEALTH		305,523	243,259	22,350	39,914	-
1700 DENTAL HEALTH		390,656	184,505	58,915	123,686	23,550
1700 CHRONIC DISEASES						
ENVIRONMENTAL HEALTH SERVICES		14,868,109	11,154,880	2,369,379	1,287,314	56,536
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,863,583	2,188,107	507,733	167,743	-
2100 WATER SUPPLY AND EXCRETA DISPOSAL		2,340,309	2,086,124	263,183	-	-
2200 SOLID WASTES		59,335	59,335	-	-	-
2300 ENVIRONMENTAL POLLUTION		817,730	653,542	100,235	63,953	-
2400 PROGRAM PLANNING AND GENERAL ACTIVITIES		8,510	2,700	5,810	-	-
2500 AIR POLLUTION		125,685	123,685	2,000	-	-
2600 RADIATION AND ISOTOPES		68,490	68,490	-	-	-
2900 REGIONAL DEVELOPMENT		75,400	52,200	23,200	-	-
3000 OCCUPATIONAL HEALTH		2,697,622	2,228,769	429,565	-	39,288
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH		3,208,295	1,950,873	884,101	656,073	17,248
3200 PROGRAM PLANNING AND GENERAL ACTIVITIES		1,994,840	1,235,093	360,202	399,545	-
3300 FOOT-AND-MOUTH DISEASE		441,380	372,960	68,420	-	-
3500 ZOONOSSES		122,900	122,900	-	-	-
3600 QUALITY CONTROL OF FOODSTUFFS		35,030	10,100	24,930	-	-
3700 QUALITY CONTROL OF DRUGS						
3700 PREVENTION OF ACCIDENTS						
COMPLEMENTARY SERVICES		4,596,374	3,276,216	734,169	577,589	8,400
4100 NURSING		1,300,619	1,186,059	114,560	-	-
4200 LABORATORIES		2,490,915	1,252,603	95,739	-	-
4300 EPIDEMIOLOGICAL SURVEILLANCE		137,855	128,615	9,240	577,589	8,400
4400 HEALTH EDUCATION		328,643	234,725	93,918	-	-
4500 REHABILITATION						
II. DEVELOPMENT OF THE INFRASTRUCTURE		24,106,559	13,861,777	7,191,297	346,755	2,700,730
HEALTH SYSTEMS		13,163,899	9,646,447	2,083,625	25,055	1,408,772
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,670,494	2,279,119	18,470	-	372,905
5100 GENERAL PUBLIC HEALTH SYSTEMS		2,541,032	3,117,799	1,233,580	-	189,653
5200 MEDICAL CARE SYSTEMS		1,478,615	913,100	504,415	-	61,100
5300 PLANNING		765,226	681,762	62,344	-	21,120
5400 STATISTICS AND INFORMATION SYSTEMS		2,286,061	1,434,846	145,870	25,055	680,250
5500 MANAGEMENT SYSTEMS		1,422,471	1,219,821	118,946	-	83,704
DEVELOPMENT OF HUMAN RESOURCES		4,987,921	2,885,373	2,024,245	35,400	42,903
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,056,123	1,031,452	981,768	-	42,903
6100 PUBLIC HEALTH		642,520	236,000	148,520	-	-
6200 MEDICINE		453,855	308,255	145,600	-	-
6300 NURSING		411,689	271,099	125,590	15,000	-
6400 ENVIRONMENTAL SCIENCES		251,335	136,075	115,260	-	-
6500 VETERINARY MEDICINE		470,310	265,490	205,820	-	-
6600 DENTISTRY		446,257	313,717	132,880	-	-
6700 BIOSTATISTICS		2,700	2,700	-	-	-
6900 OTHER		452,132	262,925	168,807	20,400	-
PHYSICAL RESOURCES		868,135	772,714	95,421	-	-
7300 PRODUCTION OF BIOLOGICALS		535,600	482,245	53,355	-	-
7400 MAINTENANCE OF HEALTH CARE FACILITIES		332,535	290,469	42,066	-	-
7800 FINANCIAL RESOURCES		69,875	69,875	-	-	-
TECHNOLOGICAL RESOURCES		4,692,119	493,368	2,949,696	-	1,249,055
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES		107,595	100,595	7,000	-	-
8100 TEXTBOOKS AND OTHER TEACHING MATERIALS		1,723,035	35,365	1,687,670	-	-
8300 MEDICAL TEXTBOOKS		188,000	-	188,000	-	-
8400 NURSING TEXTBOOKS		28,142	58,142	-	-	-
8500 OTHER		1,143,277	6,500	985,362	-	151,415
8600 REGIONAL LIBRARIES		1,097,640	-	-	-	1,097,640
8700 EDITORIAL SERVICES		374,430	292,766	81,664	-	-
8700 OTHER TECHNOLOGICAL RESOURCES						
8900 RESEARCH COORDINATION		324,610	-	38,310	286,300	-
III. ADMINISTRATIVE DIRECTION		6,978,905	-	52,500	-	6,926,405
9100 EXECUTIVE AND TECHNICAL DIRECTION		643,875	-	-	-	643,875
9200 PROGRAM SERVICES		462,870	-	-	-	462,870
9300 ADMINISTRATIVE SERVICES		3,878,320	-	52,500	-	3,825,820
9400 GENERAL EXPENSES		1,993,840	-	-	-	1,993,840
IV. GOVERNING BODIES		553,820	-	-	-	553,820
V. INCREASE TO ASSETS		650,000	-	-	-	650,000
GRAND TOTAL		70,402,050	40,270,499	14,072,721	5,139,389	10,919,441
PER CENT OF TOTAL		100.0	57.2	20.0	7.3	15.5

TABLE 3 . . . continued
PROGRAM BUDGET - DETAIL 1978

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		32,406,360	22,646,032	5,510,465	4,196,406	53,457
SERVICES TO INDIVIDUALS		16,654,381	10,872,115	3,123,839	2,634,878	23,549
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES		161,220	161,220	-	-	-
0100 COMMUNICABLE DISEASES		373,255	296,080	77,175	-	-
0200 MALARIA		1,851,385	1,721,330	51,520	78,535	-
0400 TUBERCULOSIS		203,635	163,250	40,085	-	-
0500 LEPROSY		149,400	136,400	11,900	1,500	-
0600 VENEREAL DISEASES		9,500	6,000	3,500	-	-
0700 AEDES AEGYPTI-BORNE DISEASES		402,365	397,095	5,310	-	-
0800 PARASITIC DISEASES		90,320	85,010	5,310	-	-
0900 VECTOR BIOLOGY AND CONTROL		604,800	133,040	-	471,760	-
1200 OTHER COMMUNICABLE DISEASES		177,500	145,990	22,510	9,000	-
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE		6,333,821	5,040,000	1,146,162	147,659	-
1400 NUTRITION		5,355,172	1,877,437	1,632,017	1,845,718	-
1500 MENTAL HEALTH		270,878	230,138	40,740	-	-
1600 DENTAL HEALTH		34,920	28,180	6,740	-	-
1700 CHRONIC DISEASES		329,210	191,685	33,270	80,706	23,549
ENVIRONMENTAL HEALTH SERVICES		11,683,634	8,499,094	1,778,597	1,386,035	19,908
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,570,245	1,866,074	530,064	171,307	-
2100 WATER SUPPLY AND EXCRETA DISPOSAL		899,536	869,756	29,780	-	-
2200 SOLID WASTES		94,200	94,200	-	-	-
2300 ENVIRONMENTAL POLLUTION		605,651	465,980	47,671	92,000	-
2400 PROGRAM PLANNING AND GENERAL ACTIVITIES		7,053	2,400	4,653	-	-
2500 AIR POLLUTION		139,300	136,845	2,655	-	-
2600 RADIATION AND ISOTOPES		73,125	73,125	-	-	-
2700 REGIONAL DEVELOPMENT		23,700	6,000	17,700	-	-
2800 OCCUPATIONAL HEALTH		1,342,727	1,195,732	146,995	-	-
2900 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH		2,366,083	1,766,798	497,869	682,008	19,908
3000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,134,007	1,288,099	405,188	440,720	-
3100 FOOT-AND-MOUTH DISEASE		296,380	224,480	71,900	-	-
3200 ZOONOSSES		500,960	498,305	2,655	-	-
3300 QUALITY CONTROL OF FOODSTUFFS		30,465	9,000	21,465	-	-
3400 QUALITY CONTROL OF DRUGS		4,068,345	3,274,823	608,029	175,493	10,000
3500 PREVENTION OF ACCIDENTS		1,378,690	1,255,315	123,375	-	-
4100 LABORATORIES		263,775	263,775	-	-	-
4200 EPIDEMIOLOGICAL SURVEILLANCE		2,011,795	1,453,803	372,499	175,493	10,000
4300 HEALTH EDUCATION		139,945	129,325	10,620	-	-
4400 REHABILITATION		274,140	215,730	58,410	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		21,873,906	12,833,140	6,171,267	361,975	2,507,524
HEALTH SYSTEMS		11,370,080	8,939,784	1,230,576	24,175	1,175,545
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,975,430	2,515,230	21,735	-	438,465
5100 GENERAL PUBLIC HEALTH SYSTEMS		3,289,608	2,519,677	769,931	-	-
5200 MEDICAL CARE SYSTEMS		905,775	763,870	141,905	-	-
5300 PLANNING		734,747	698,827	35,920	-	-
5400 STATISTICS AND INFORMATION SYSTEMS		2,106,635	1,464,015	189,418	24,175	737,080
5500 MANAGEMENT SYSTEMS		1,057,835	978,165	79,670	-	-
DEVELOPMENT OF HUMAN RESOURCES		4,916,890	2,917,109	1,950,752	36,000	13,029
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES		2,005,420	995,019	997,372	-	13,029
6100 PUBLIC HEALTH		444,175	296,800	147,375	-	-
6200 MEDICINE		456,985	301,800	155,185	-	-
6300 NURSING		391,070	246,345	129,725	15,000	-
6400 ENVIRONMENTAL SCIENCES		253,295	145,610	107,685	-	-
6500 VETERINARY MEDICINE		452,730	274,080	206,650	-	-
6600 DENTISTRY		338,885	226,555	112,330	-	-
6700 BIOSTATISTICS		3,000	3,000	-	-	-
6800 OTHER		570,330	454,900	94,430	21,000	-
PHYSICAL RESOURCES		662,106	572,162	89,944	-	-
7300 PRODUCTION OF BIOLOGICALS		480,011	398,722	81,289	-	-
7400 MAINTENANCE OF HEALTH CARE FACILITIES		182,095	173,440	8,655	-	-
7800 FINANCIAL RESOURCES		73,955	73,955	-	-	-
TECHNOLOGICAL RESOURCES		4,510,420	330,130	2,861,340	-	1,318,950
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES		115,115	107,115	8,000	-	-
8100 TEXTBOOKS AND OTHER TEACHING MATERIALS		1,945,710	37,155	1,908,555	-	-
8300 MEDICAL TEXTBOOKS		235,000	-	235,000	-	-
8500 NURSING TEXTBOOKS		309,865	5,000	644,470	-	160,395
8600 REGIONAL LIBRARIES		1,159,595	-	-	-	1,158,355
8700 EDITORIAL SERVICES		246,175	180,860	65,315	-	-
8900 OTHER TECHNOLOGICAL RESOURCES		340,455	-	38,655	301,800	-
RESEARCH COORDINATION		7,447,320	-	55,125	-	7,392,195
III. ADMINISTRATIVE DIRECTION		755,435	-	-	-	755,435
9100 EXECUTIVE AND TECHNICAL DIRECTION		492,500	-	-	-	492,500
9200 PROGRAM SERVICES		4,152,500	-	55,125	-	4,100,185
9300 ADMINISTRATIVE SERVICES		2,044,075	-	-	-	2,044,075
9400 GENERAL EXPENSES		588,100	-	-	-	588,100
IV. GOVERNING BODIES		500,000	-	-	-	500,000
V. INCREASE TO ASSETS		62,815,686	35,479,172	11,736,857	4,558,381	11,041,276
GRAND TOTAL		100.0	56.4	18.7	7.3	17.6
PER CENT OF TOTAL						

TABLE 3 . . . continued
PROGRAM BUDGET - DETAIL 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		32,467,680	22,871,938	5,416,377	4,169,921	9,444
	SERVICES TO INDIVIDUALS	15,264,653	9,968,939	2,775,052	2,520,662	-
0000	PROGRAM PLANNING AND GENERAL ACTIVITIES	169,750	169,750	-	-	-
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	412,980	324,300	88,680	-	-
0200	MALARIA	1,898,660	1,780,090	30,180	88,390	-
0400	TUBERCULOSIS	239,275	173,155	46,120	-	-
0500	LEPROSY	158,055	142,055	11,500	4,500	-
0600	VENEREAL DISEASES	10,350	6,800	3,550	-	-
0700	Aedes Aegypti-BORNE DISEASES	427,375	421,255	6,120	-	-
0800	PARASITIC DISEASES	93,580	84,400	9,180	-	-
0900	VECTOR BIOLOGY AND CONTROL	646,750	142,260	-	504,490	-
1200	OTHER COMMUNICABLE DISEASES	199,980	150,110	26,670	10,200	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	4,898,341	3,868,026	875,395	154,920	-
1400	NUTRITION	5,176,727	1,853,998	1,564,567	1,758,162	-
1500	MENTAL HEALTH	292,565	254,495	34,070	-	-
1600	DENTAL HEALTH	402,175	352,905	49,270	-	-
1700	CHRONIC DISEASES	241,090	211,340	29,750	-	-
	ENVIRONMENTAL HEALTH SERVICES	12,931,102	9,475,615	1,966,949	1,479,094	9,444
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	2,804,553	1,988,221	590,890	223,442	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	801,162	777,052	24,110	-	-
2200	SOLID WASTES	147,700	147,700	-	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	766,235	685,175	18,060	63,000	-
2400	AIR POLLUTION	287,120	238,120	3,060	-	-
2500	RADIATION AND ISOTOPES	153,960	150,900	3,060	-	-
2900	REGIONAL DEVELOPMENT	81,660	81,660	-	-	-
3000	OCCUPATIONAL HEALTH	27,050	4,400	22,650	-	-
	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,346,184	1,187,684	158,500	-	-
3200	FOOT-AND-MOUTH DISEASE	3,057,029	1,819,938	520,501	707,146	9,444
3300	ZOONoses	2,868,609	1,868,865	516,238	483,506	-
3500	QUALITY CONTROL OF FOODSTUFFS	315,820	237,100	78,720	-	-
3600	QUALITY CONTROL OF DRUGS	532,600	515,120	17,480	-	-
3700	PREVENTION OF ACCIDENTS	20,480	6,800	13,680	-	-
	COMPLEMENTARY SERVICES	4,271,925	3,427,384	674,376	170,165	-
4100	NURSING	1,527,760	1,363,640	164,120	-	-
4200	LABORATORIES	287,070	238,120	48,950	-	-
4300	EPIDEMOLOGICAL SURVEILLANCE	2,033,930	1,491,199	372,566	170,165	-
4400	HEALTH EDUCATION	150,125	137,885	12,240	-	-
4500	REHABILITATION	273,040	196,540	76,500	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		22,233,582	12,369,308	6,753,469	412,130	2,698,675
	HEALTH SYSTEMS	12,091,700	9,282,127	1,471,573	66,050	1,271,950
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	3,233,007	2,720,592	35,500	-	476,915
5100	GENERAL PUBLIC HEALTH SYSTEMS	3,646,153	2,682,030	964,123	-	-
5200	MEDICAL CARE SYSTEMS	892,250	749,770	142,480	-	-
5300	PLANNING	707,305	665,585	41,720	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	2,532,360	1,504,995	166,280	66,050	795,035
5500	MANAGEMENT SYSTEMS	1,080,625	959,155	121,470	-	-
	DEVELOPMENT OF HUMAN RESOURCES	4,325,070	2,232,435	2,056,835	35,800	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,677,780	626,440	1,051,340	-	-
6100	PUBLIC HEALTH	389,680	230,820	158,860	-	-
6200	MEDICINE	496,660	328,100	168,560	-	-
6300	NURSING	415,225	263,265	136,960	15,000	-
6400	ENVIRONMENTAL SCIENCES	284,860	157,195	127,665	-	-
6500	VETERINARY MEDICINE	491,825	186,035	275,660	-	-
6600	DENTISTRY	229,500	115,090	114,410	-	-
6700	BIOSTATISTICS	3,400	3,400	-	-	-
6900	OTHER	426,270	322,090	83,380	20,800	-
	PHYSICAL RESOURCES	498,835	439,615	59,220	-	-
7300	PRODUCTION OF BIOLOGICALS	356,090	305,930	50,160	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	142,745	133,685	9,060	-	-
7800	FINANCIAL RESOURCES	78,280	78,280	-	-	-
	TECHNOLOGICAL RESOURCES	4,890,357	336,851	3,126,781	-	1,426,725
8000	PROGRAM PLANNING AND GENERAL ACTIVITIES	128,850	120,850	8,000	-	-
	TEXTBOOKS AND OTHER TEACHING MATERIALS					
8100	MEDICAL TEXTBOOKS	2,173,455	39,795	2,133,660	-	-
8300	NURSING TEXTBOOKS	292,000	-	292,000	-	-
8500	REGIONAL LIBRARIES	835,415	5,400	660,260	-	169,755
8600	EDITORIAL SERVICES	1,226,970	-	-	-	1,256,970
8700	OTHER TECHNOLOGICAL RESOURCES	203,667	170,806	32,861	-	-
8900	RESEARCH COORDINATION	349,340	-	39,060	310,280	-
III. ADMINISTRATIVE DIRECTION		8,092,125	-	57,880	-	8,034,245
9100	EXECUTIVE AND TECHNICAL DIRECTION	875,895	-	-	-	875,895
9200	PROGRAM SERVICES	223,435	-	-	-	923,435
9300	ADMINISTRATIVE SERVICES	453,770	-	57,880	-	4,495,590
9400	GENERAL EXPENSES	2,139,325	-	-	-	2,139,325
9500	IV. GOVERNING BODIES	646,830	-	-	-	646,830
9600	V. INCREASE TO ASSETS	500,000	-	-	-	500,000
	GRAND TOTAL	63,940,217	35,241,246	12,227,726	4,582,051	11,889,194
	PER CENT OF TOTAL	100.0	55.1	19.1	7.2	18.6

TABLE 4
DISTRIBUTION OF PERSONNEL AND FELLOWSHIPS BY PROGRAM
1977 - 1978 - 1979

PROGRAM	1977				1978				1979			
	PERSONNEL MONTHS		FELLOW- SHIP MOS.	STC MOS.	PERSONNEL MONTHS		FELLOW- SHIP MOS.	STC MOS.	PERSONNEL MONTHS		FELLOW- SHIP MOS.	STC MOS.
	PROF.	LOCAL			PROF.	LOCAL			PROF.	LOCAL		
I. PROGRAM OF SERVICES	5148	8619	811	3251	4739	8399	487	2120	4434	8202	451	1985
SERVICES TO INDIVIDUALS	2280	4260	235	1335	2113	4007	203	1174	1962	3834	162	1041
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES	24	24			24	24			24	24		
0100 COMMUNICABLE DISEASES	60	12	8	56	60	12	9	55	60	12	13	59
0200 MALARIA	420	60	8	71	420	60	7	52	408	60	5	24
0400 TUBERCULOSIS	36	12	3	9	36	12	3	9	36	12	8	12
0500 LEPROSY	24	12	3		24	12	3		24	12	3	
0600 VENEREAL DISEASES	12		2		12		2		12		2	
0700 AIDES AEGYPTI-BORNE DISEASES	78	24	3	3	72	24	4	6	72	24	4	6
0800 PARASITIC DISEASES	12		3	6	12		3	6	12		3	9
0900 VECTOR BIOLOGY AND CONTROL	132	36	3		132	36	3		132	36	3	
1200 OTHER COMMUNICABLE DISEASES	12	12	18		12	12	18		12	12	18	
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	365	228	95	334	354	234	86	258	324	210	35	168
1400 NUTRITION	990	3756	43	796	830	3504	32	716	738	3360	31	682
1500 MENTAL HEALTH	48	24	9	24	48	24	5	24	48	24	7	21
1600 DENTAL HEALTH	36	24	20	15	36	24	14	30	48	24	21	36
1700 CHRONIC DISEASES	43	36	13	21	41	29	10	12	24	24	9	18
ENVIRONMENTAL HEALTH SERVICES	2098	3555	491	1578	1882	3516	206	671	1728	3492	205	640
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	390	378	88	221	360	372	46	177	372	372	44	204
2100 WATER SUPPLY AND EXCRETA DISPOSAL	436	156	143	337	375	132	24	29	204	84	25	18
2200 SOLID WASTES	20				30				36			
2300 ENVIRONMENTAL POLLUTION	79	84	70	101	96	108	32	46	132	132	23	3
2400 PROGRAM PLANNING AND GENERAL ACTIVITIES	24	12	2	3	24	12	4	3	24	12	4	3
2500 AIR POLLUTION	12	12	4		12	12	4		12	12	5	
2900 REGIONAL DEVELOPMENT	17	12	1	26	12	12	1	20	12	12	1	20
3000 OCCUPATIONAL HEALTH												
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	401	132	89	481	229	132	15	145	180	132	18	141
3200 PROGRAM PLANNING AND GENERAL ACTIVITIES	288	1749	75	255	300	1716	38	105	312	1716	21	81
3300 FOOT-AND-MOUTH DISEASE	335	996	8	139	312	996	25	131	312	996	43	135
3500 ZOONOSES	72	12	6	6	60	12	6		60	12	6	
3600 QUALITY CONTROL OF FOODSTUFFS	24	12	3	9	72	12	5	3	72	12	8	17
3700 PREVENTION OF ACCIDENTS												
COMPLEMENTARY SERVICES	770	804	85	338	744	876	78	275	744	876	84	304
4100 NURSING	348	72	15	78	336	72	15	75	348	72	14	96
4200 LABORATORIES	36		36		36		36		36		26	30
4300 EPIDEMIOLOGICAL SURVEILLANCE	312	720	14	74	312	792	22	95	312	792	26	91
4400 HEALTH EDUCATION	26	12	3	12	24	12	3	12	24	12	3	12
4500 REHABILITATION	48		15	80	36		17	66	24		20	75
II. DEVELOPMENT OF THE INFRASTRUCTURE	3030	2255	716	3418	2910	2292	429	2052	2771	2220	346	2086
HEALTH SYSTEMS	1914	1308	483	2181	1859	1356	209	1061	1835	1356	187	1195
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	431	708	13	11	467	720	12	11	467	720	11	25
5100 GENERAL PUBLIC HEALTH SYSTEMS	466	180	243	1418	396	204	124	728	420	204	120	841
5200 MEDICAL CARE SYSTEMS	168	72	63	500	148	72	13	141	132	72	15	124
5300 PLANNING	123	36	29	33	124	48	24	33	120	40	9	36
5400 STATISTICS AND INFORMATION SYSTEMS	124	276	23	80	468	276	19	79	468	276	20	77
5500 MANAGEMENT SYSTEMS	252	36	112	139	232	36	17	69	228	36	12	92
DEVELOPMENT OF HUMAN RESOURCES	578	443	173	1060	545	444	175	833	444	372	127	794
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	300	276	80	384	300	276	58	305	228	204	32	274
6100 PUBLIC HEALTH	12	12	4	66	12	12	4	55	12	12	4	58
6200 MEDICINE	36	36	20	130	36	36	19	119	48	36	16	124
6300 NURSING	60	24	11	46	48	24	10	43	48	24	10	48
6400 ENVIRONMENTAL SCIENCES	24	48	19	69	24	48	17	61	24	48	17	76
6500 VETERINARY MEDICINE	60	16	16	97	49		17	83	36		17	70
6600 DENTISTRY	48	11	13	104	40	12	13	74	12	12	14	68
6700 BIOSTATISTICS	38	36	1		36	36	36	93	36	36	16	76
6900 OTHER			9	165								
PHYSICAL RESOURCES	94	48	36	108	74	36	22	85	60	36	11	45
7300 PRODUCTION OF BIOLOGICALS	42	24	27	59	38	24	20	82	36	24	9	42
7400 MAINTENANCE OF HEALTH CARE FACILITIES	52	24	9	49	36	12	3	24	12	2	2	3
FINANCIAL RESOURCES	12	12	2		12	12	2		12	12	2	
TECHNOLOGICAL RESOURCES	384	420	19	66	372	420	17	70	372	420	16	49
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES	12	24	5		12	24	5		12	24	5	
8100 TEXTBOOKS AND OTHER TEACHING MATERIALS	36	84	2		36	84	2		36	84	2	
8300 MEDICAL TEXTBOOKS			4				4				4	
8500 NURSING TEXTBOOKS	108	36	1	6	108	36	2	22	108	36	2	21
8600 REGIONAL LIBRARIES	192	264	7	60	192	264	4	48	192	264	3	28
8700 EDITORIAL SERVICES	36	12			24	12			24	12		
OTHER TECHNOLOGICAL RESOURCES												
RESEARCH COORDINATION	48	24	3	3	48	24	4	3	48	24	3	3
III. ADMINISTRATIVE DIRECTION	864	2016			882	2040			864	2052		
9100 EXECUTIVE AND TECHNICAL DIRECTION	108	108			132	120			132	120		
9200 PROGRAM SERVICES	96	84			96	84			96	84		
9300 ADMINISTRATIVE SERVICES	660	1824			654	1836			636	1848		
IV. GOVERNING BODIES	72	96			72	96			72	96		
GRAND TOTAL	9114	12986	1527	6669	8603	12827	916	4172	8141	12570	797	4071

SUMMARY

SUMMARY

ALL PARTS - ALL FUNDS

1977 - 1978 - 1979

	FUND SYMBOL	NUMBER OF PERSONNEL MONTHS			INVESTMENT		
		1977	1978	1979	1977	1978	1979
					\$	\$	\$
DETAIL BY PART:							
PART I SERVICES TO INDIVIDUALS.....TOTAL		13,767	13,138	12,636	38,112,766	32,406,360	32,467,680
PAHO REGULAR	PR	4,843	4,890	4,896	12,216,470	13,445,210	14,266,135
GRANTS RELATED TO CAREC	PJ	648	732	732	903,771	608,555	548,190
PAHO COMMUNITY WATER SUPPLY	PW	358	300	84	1,498,025	270,951	57,617
INCAP AND RELATED GRANTS	PA/PN	3,396	3,336	3,336	2,682,595	2,825,000	2,925,000
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION	PH	696	360	156	1,190,278	711,106	402,769
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	1,704	1,447	1,314	4,997,827	1,935,301	1,562,341
WHO REGULAR	WR	1,602	1,644	1,716	6,063,300	6,653,465	7,430,285
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	177	105	132	2,036,400	1,082,493	1,922,540
UNITED NATIONS FUND FOR POPULATION ACTIVITIES	UNFPA	341	324	270	6,508,463	4,874,279	3,352,803
WHO GRANTS AND OTHER CONTRIBUTIONS	WD	2	-	-	15,637	-	-
PART II DEVELOPMENT OF THE INFRASTRUCTURE.....TOTAL		5,285	5,202	4,991	23,856,559	21,623,906	21,983,582
PAHO REGULAR	PR	3,428	3,448	3,444	9,965,980	10,877,860	11,945,515
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION	PH	166	167	167	2,661,090	2,536,725	2,703,549
NATURAL DISASTER RELIEF VOLUNTARY FUND	PD	-	-	-	100,000	-	-
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	285	200	12	4,401,662	1,242,899	515,863
WHO REGULAR	WR	1,122	1,164	1,200	5,003,940	5,384,935	5,767,210
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	284	223	168	1,723,887	1,581,487	1,051,445
PART III ADMINISTRATIVE DIRECTION.....TOTAL		2,880	2,922	2,916	6,978,905	7,447,320	8,092,125
PAHO REGULAR	PR	2,388	2,430	2,424	5,400,080	5,693,785	6,265,720
WHO REGULAR	WR	492	492	492	1,578,825	1,753,535	1,826,405
PART IV GOVERNING BODIES.....TOTAL		168	168	168	553,820	588,100	646,830
PAHO REGULAR	PR	132	132	132	385,885	411,035	444,730
WHO REGULAR	WR	36	36	36	167,935	177,065	202,100
PART V INCREASE TO ASSETS.....TOTAL		-	-	-	650,000	500,000	500,000
PAHO REGULAR	PR	-	-	-	650,000	500,000	500,000
PART VI SPECIAL FUND FOR HEALTH PROMOTIONTOTAL		-	-	-	250,000	250,000	250,000
PAHO REGULAR	PR	-	-	-	250,000	250,000	250,000
.....TOTAL ALL PARTS.....		22,100	21,430	20,711	70,402,050	62,815,686	63,940,217
DETAIL BY FUND:							
PAHO REGULAR	PR	10,791	10,900	10,896	28,868,415	31,177,890	33,672,100
GRANTS RELATED TO CAREC	PJ	648	732	732	903,771	608,555	548,190
PAHO COMMUNITY WATER SUPPLY	PW	358	300	84	1,498,025	270,951	57,617
INCAP AND RELATED GRANTS	PA/PN	3,396	3,336	3,336	2,682,595	2,825,000	2,925,000
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION	PH	862	527	323	3,851,368	3,247,831	3,106,318
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	1,989	1,647	1,326	9,399,489	3,178,200	2,078,204
NATURAL DISASTER RELIEF VOLUNTARY FUND	PD	-	-	-	100,000	-	-
WHO REGULAR	WR	3,252	3,336	3,444	12,814,000	13,969,000	15,226,000
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	461	328	300	3,760,287	2,663,980	2,973,985
UNITED NATIONS FUND FOR POPULATION ACTIVITIES	UNFPA	341	324	270	6,508,463	4,874,279	3,352,803
WHO GRANTS AND OTHER CONTRIBUTIONS	WD	2	-	-	15,637	-	-

ANALYSIS OF THE PROGRAMS

I. PROGRAM OF SERVICESServices to Individuals

0000 - PROGRAM PLANNING AND GENERAL ACTIVITIES

There are two divisions which have responsibility, among other things, for program planning and development of activities for services to individuals in disease control and family health. The chiefs of these two divisions are assigned to this program.

	1977	1978	1979
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FUNDS BUDGETED	\$ 152,850	\$ 161,220	\$ 169,750
PER CENT CF TOTAL	.2	.3	.3
PERSONNEL MONTHS	48	48	48

---- PROJECTS ----

HEADQUARTERS

Communicable Diseases

0100 - PROGRAM PLANNING AND GENERAL ACTIVITIES

Immunization remains the most effective and proven preventive medical tool for primary health care programs. With the eradication of smallpox from the Americas this project will be the focal point of technical assistance to Member Countries wishing to participate in the PAHO/WHO-UNICEF Expanded Program on Immunization (EPI). Emphasis will be on the extension of immunization of infants and young children in rural and peri-urban areas against the major diseases preventable by vaccination. These are whooping cough, diphtheria, tetanus, tuberculosis, poliomyelitis and measles. The project will be implemented in close collaboration with health planning, health education, maternal child health, primary health care, laboratory, and epidemiology projects.

Major activities include the preparation of guidelines and manuals on immunization, organization of international and national seminars on EPI, assistance with operational problems which arise in immunization programs, development of improved methods of surveillance, and evaluation of immunization activities. Operational research is primarily concerned with strengthening the "cold chain" under field conditions. Feasibility studies are now under way for a rotating fund for the purchase of vaccine.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 329,431	\$ 373,255	\$ 412,980
PER CENT CF TOTAL	.5	.6	.6
PERSONNEL MONTHS	72	72	72
CONSULTANT MONTHS	8	9	13
FELLOWSHIP MONTHS	56	55	59
SEMINARS AND COURSES	\$ 23,336	\$ 28,500	\$ 28,500
SUPPLIES AND EQUIPMENT	\$ 62,600	\$ 62,500	\$ 59,900

---- PROJECTS ----

AMRO-0170
ARGENTINA-0100
CHILE-0100
ECUADOR-0100

GUATEMALA-0100
PARAGUAY-0100
PERU-0100
URUGUAY-0100

VENEZUELA-0100

0200 - MALARIA

In 1975, a new strategy for the malaria program was proposed by the II Meeting of Directors of National Malaria Services of the Americas, and it was subsequently approved by the Directing Council of PAHO at its XXIII Meeting the same year. It calls for a thorough review of the program and elaboration of a realistic plan of operations in the light of the actual epidemiologic and economic conditions of each country.

During 1975 and 1976, many countries in which the malaria situation was stationary, or had shown a marked deterioration, initiated a program review and adopted a flexible approach in the application of antimalaria measures along the lines indicated by the new strategy; drainage, land fill, use of larvivorous fish, larviciding, etc., were utilized together with residual house spraying and antimalarial drugs. Where technical problems exist, efforts were made to conduct research programs and field trials in order to find possible solutions at the country level. For those problems which affect various countries such as resistance of vectors to insecticides or parasite resistance to antimalaria drugs, research activities were intensified aimed at

finding substitute or new antimalaria measures; during 1976, a new AMRO research project to study malaria immunology and chemotherapy was initiated in Colombia, and testing of new insecticides, studies of larvivorous fish and investigation in insecticide resistance were intensified in El Salvador through another AMRO project. To meet the new responsibilities of the malaria services, new training programs were initiated in 1976; a seminar on mosquito control was held in the State of California with field practice in El Salvador; a medical entomology course, with special emphasis on epidemiology and ecology, was held at the University of São Paulo; and a public health course with specialization in malaria and other parasitic diseases was held at the School of Public Health in Mexico.

As of 31 December 1975, eradication of malaria (maintenance phase) had been achieved in an extension which contained 48.3% of the population of the originally malarious area, and malaria transmission was interrupted (consolidation phase) in areas with 21.7% of the population. In terms of the number of countries and territories (political units) in the originally malarious area, of the total 34 units malaria eradication was certified in 12, 9 were given good prospects of achieving eradication within a specific time limit, and in 13 malaria transmission still occurs in part of the area. Among the first two groups of countries and territories, totaling 21 units, no major difficulties are being encountered. However, in the third group of 13 units serious administrative and/or technical problems exist, and very little or no progress has been made; there are areas where certain progress has been made, areas where the malaria situation has been stationary and even areas where deterioration has been observed.

For the period 1977 through 1980, PAHO/WHO will continue to assist with technical guidance for the conduct of the program; technical assistance to individual countries by assignment of permanent advisers and/or by visits of short-term consultants or of regional advisers (central and intercountry levels); promotion of training of technical personnel by provision of fellowships and organization of seminars, meetings and training courses; promotion and support of operational research at country level aiming at solution of local problems; development of new control measures and research activities through AMRO projects; reference services and coordination of the programs through exchange of information, meetings among bordering countries and a continental meeting; and limited amounts of antimalarial drugs, laboratory supplies and equipment.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,895,920	\$ 1,851,385	\$ 1,898,660
PER CENT OF TOTAL	2.7	2.9	3.0
PERSONNEL MONTHS	480	480	468
CONSULTANT MONTHS	6	5	5
FELLOWSHIP MONTHS	71	52	24
SEMINARS AND COURSES	\$ 15,500	\$ 5,500	\$ 5,700
SUPPLIES AND EQUIPMENT	\$ 253,430	\$ 189,315	\$ 201,405
OTHER	\$ 63,900	\$ 10,000	\$ 10,000

---- PROJECTS ----

AMRO-0200	COSTA RICA-0200	MEXICO-0200
AMRO-0201	DOMINICAN REPUBLIC-0200	NICARAGUA-0200
AMRO-0202	ECUADOR-0200	PANAMA-0200
ARGENTINA-0200	EL SALVADOR-0200	PARAGUAY-0200
BELIZE-0200	FRENCH ANTILLES-0200	PERU-0200
BOLIVIA-0200	GUATEMALA-0200	SURINAM-0200
BRAZIL-0200	GUYANA-0200	
COLOMBIA-0200	HAITI-0200	

0400 - TUBERCULOSIS

The objective of this program is to accelerate the reduction of tuberculosis infection, morbidity and mortality at a rate compatible with modern methods of control. The general policy for the program and the goals to be achieved in the present decade were approved by the Ministers of Health at their III Special Meeting in Santiago, Chile, in 1972. Shortly thereafter, they were reaffirmed by the II Regional Seminar on Tuberculosis, which was held in Bogotá, Colombia, and attended by representatives of all the countries of the Hemisphere. Tuberculosis control is based on the application of not one but of several measures, which include 1) increasing the biological resistance to the disease in the population under 15 years of age by achieving and maintaining a high level of BCG vaccination; 2) detecting the principal sources of infection of the population through the bacteriological examination of the sputum of persons with respiratory symptoms; and 3) neutralizing the sources of infection discovered through outpatient chemotherapy treatment.

To ensure that these activities are carried out on a continuing basis and achieve national coverage, at a cost compatible with the resources available, they must be incorporated into the activities of the general health services. All the countries of Latin America have officially affirmed that integration constitutes the national tuberculosis control policy. However, in most of them, the process of integration is still in the initial stages, and it is recognized that, even if the tuberculosis control program were integrated into 100% of the health establishments, coverage would not be complete, since a large proportion of the population does not have access to them. Consequently, expansion of coverage of the tuberculosis program is linked to extension of coverage of basic health services.

The priority control measure in the child population is BCG vaccination. For technical reasons, freeze-dried, thermo-stable vaccine, prepared from strains of high antigenic power and great virulence in laboratory animals is preferred. For quality and cost reasons the production of freeze-dried vaccine should be centralized in a few laboratories. Direct BCG vaccination, i.e., without a prior tuberculin test and simultaneous with other immunizations, is recommended for operational reasons. So far no better method of administration is known than the intradermal route. Because of its operational advantages, investigations are being carried out in Chile, Mexico and Uruguay on the effectiveness of the bifurcated needle in BCG vaccination.

Despite the high priority that should be given to immunization on a national scale, BCG vaccination programs are far below the desired coverage level, except in a few countries. In 20 Latin American countries, only 25% of the children under one year of age were vaccinated with BCG in 1974. In children under 15 years of age, the coverage was less than 40%. Bacteriological examination of the sputum of persons with respiratory symptoms is the most effective, economical and desirable method for detecting sources of infection in the community. In Latin America, the prevalence of tuberculosis in this population group ranges from 2 to 10%.

Special projects for the evaluation of the integrated tuberculosis program are being carried out in Colombia and Venezuela. In Argentina, the principal objectives of the program are to conduct an integrated program in the province of Santa Fe and to carry out epidemiological surveillance studies of tuberculosis throughout the country. The regional project for advisory services in tuberculosis nursing will be extended to all communicable diseases, since its primary purpose is to make the most efficient use of nursing personnel in programs for surveillance and control of these diseases.

Technical assistance in the reorganization of tuberculosis programs and the integration of these programs into the general health structure will continue to be given. A manual of standards for programming, supervision and evaluation of control activities in an integrated program will be made and submitted to an advisory committee for consideration. Specialized assistance will be provided through short-term consultants in laboratory techniques for diagnosis and in the organization of laboratory services for a tuberculosis program, production and quality control of BCG vaccine, design of operational and technical research and personnel training. The annual regional course on tuberculosis control will take place in Caracas, Venezuela, in order to train the professionals in charge of the national programs. Compilation and analysis of data collected in the special surveys of tuberculosis education in schools of medicine and nursing in Latin America will continue.

	1977	1978	1979
FUNDS BUDGETED	\$ 189,670	\$ 203,635	\$ 239,275
PER CENT OF TOTAL	.3	.3	.4
PERSONNEL MONTHS	48	48	48
CONSULTANT MONTHS	8	7	8
FELLOWSHIP MONTHS	9	9	12
SEMINARS AND COURSES	\$ 27,720	\$ 32,120	\$ 33,880
SUPPLIES AND EQUIPMENT	\$ 8,670	\$ 10,670	\$ 10,670

---- PROJECTS ----

AMRO-C400
ARGENTINA-C400

BRAZIL-0400
VENEZUELA-0400

0500-LEPROSY

During the latest full year of reporting, 1974, 12,040 new cases of leprosy were reported to the Organization from 27 countries or political units of the Americas, as compared to 11,112 new cases from 35 countries or political units in 1973. The apparent increase can be accounted for by better case finding rather than an actual increase of leprosy in the Region. The number of new cases being reported with some degree of disability, indicating late diagnosis, continues to be about 33%, and is too high. This rate should be lowered as case-finding efforts in the countries are increased. This is already occurring in some countries.

PAHO/WHO assists Member Governments who have a leprosy problem to develop more effective programs of control through better administrative practices. Emphasis is placed on aggressive case-finding programs and the early diagnosis and treatment of cases. Early case-finding and appropriate treatment can cure the disease, prevent deformity, and reduce the infectious reservoir.

Research and training are stimulated and coordinated through the Pan American Center for Research and Training in Leprosy and Tropical Diseases in Caracas, Venezuela. Studies at the Center and elsewhere in the Region are directed toward better understanding of *M. leprae* as well as the immunological response of the patient to that infection, and toward improved methods of control. Several centers have now established armadillo colonies to produce *M. leprae* for research studies, as well as to study the effect in this animal model.

	1977	1978	1979
FUNDS BUDGETED	\$ 144,878	\$ 149,400	\$ 158,055
PER CENT OF TOTAL	.2	.2	.2
PERSONNEL MONTHS	36	36	36
CONSULTANT MONTHS	3	3	3
SEMINARS AND COURSES	\$ 11,500	\$ 11,500	\$ 11,500
SUPPLIES AND EQUIPMENT	\$ 10,003	\$ 6,425	\$ 6,230
GRANTS	\$ 4,500	\$ 4,500	\$ 4,500

---- PROJECTS ----

AMRO-0500

COLOMBIA-0500

0600 - VENEREAL DISEASES

As the growing population of the Region reaches sexual maturity and opportunities for sexual exposure correspondingly increase, the incidence of sexually transmitted diseases has grown and will continue to do so. The total number of cases tends to increase in most countries, but rates fluctuate from year to year indicating improved reporting and control of these diseases as well as a probable actual increase in cases. There has been a general tendency for syphilis rates to decrease each year, or at least remain stationary. However, gonorrhea rates seem to increase in direct proportion to a country's clinical and control program efforts and its willingness to report the cases recorded.

PAHO/WHO continues to promote a comprehensive approach to venereal disease control. The program is based on the availability of adequate and acceptable clinical facilities, supported by laboratory diagnostic and screening services. Emphasis is placed on epidemiological surveillance (including data gathering and its analysis, and contact interviewing and contact tracing) in order to prevent disease and break the chain of transmission. Educational programs are directed toward the professional as well as the public and high-risk groups.

Yaws continues to occur in the Region, although with a remarkably lower incidence than before the implantation of the eradication programs of the 1950's. Several countries, recognizing that marked reduction of an endemic disease does not mean eradication, have renewed their interest in completing the program.

PAHO/WHO will continue its efforts to bring the venereal diseases under effective control, to increase the awareness of the countries that this group includes diseases other than syphilis and gonorrhea, and to complete the eradication of yaws and pinta from the Hemisphere.

	1977	1978	1979
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FUNDS BUDGETED	\$ 8,900	\$ 9,500	\$ 10,350
PER CENT OF TOTAL	-	-	*
CONSULTANT MONTHS	2	2	2
SEMINARS AND COURSES	\$ 3,500	\$ 3,500	\$ 3,550
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	PROJECTS		

AMRC-0600

0700 - Aedes aegypti-BORNE DISEASES

The principal objectives of this program are to encourage and coordinate the eradication of Aedes aegypti from the Americas and to reduce the damage caused by jungle yellow fever.

This program provides technical advisory services and helps provide supplies and equipment for planning, implementation and evaluation of Aedes aegypti eradication programs. The program also provides cooperation in organizing surveillance systems for yellow fever, dengue and dengue hemorrhagic fever and in improving the network of diagnostic laboratories, as well as in consolidating and distributing epidemiological information on the diseases within its province.

The program provides support and coordination for research on the epidemiology of the diseases, the biology and control of Aedes aegypti and the improvement of diagnostic methods.

In 1976 the PAHO/WHO Advisory Committee on Dengue, Yellow Fever and Aedes aegypti recommended a flexible control policy which is under study by the countries and which will be discussed by the Directing Council in 1977.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 382,185	\$ 402,365	\$ 427,375
PER CENT OF TOTAL	.5	.6	.7
PERSONNEL MONTHS	102	96	96
CONSULTANT MONTHS	4	4	4
FELLOWSHIP MONTHS	3	6	6
SUPPLIES AND EQUIPMENT	\$ 121,265	\$ 126,455	\$ 130,765
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	PROJECTS		

AMRC-0710
AMRC-0700
BARBADOS-0700
COLOMBIA-0200

GUYANA-0700
JAMAICA-0700
NETHERLANDS ANTILLES-0700
PANAMA-0700

WEST INDIES-0700

0800 - PARASITIC DISEASES

Chagas' disease affects at least 10 million people in the Americas and it is estimated that another 35 million are at risk of acquiring the infection. The disease may cause serious cardiac and gastrointestinal lesions of a chronic evolution which are greatly incapacitating and often lead to death during the ages of maximum economic productivity. Transmission of the disease is maintained in sylvatic and domestic cycles, the latter associated with primitive housing conditions.

Schistosomiasis affects at least 7 million people widely distributed in Brazil, Venezuela, Surinam and various Caribbean islands. In the last years the problem has increased in extent and intensity as a result of major irrigation schemes and the migratory movement of labor forces.

Other parasitic diseases, especially leishmaniasis and filariasis, including onchocerciasis and wuchereriosis, constitute important public health problems in many areas of the Americas.

PAHO/WHO provides technical assistance in the form of a short-term consultant for the study of epidemiological problems and for the planning, execution and evaluation of control programs; supports the training of personnel through fellowships; and promotes research towards the development of more effective control measures and other specific studies, such as the improvement and standardization of serological diagnosis of Chagas' disease, study of efficacy and potential side effects of anti-schistosomal drugs, and the study of clinical aspects of leishmaniasis. PAHO/WHO also promotes and supports technical and scientific meetings on serology, immunology, the needs of future research on Chagas' disease, and control and research of onchocerciasis. In the last two years, both the PAHO Directing Council and the World Health Assembly have requested increased attention to research and control of tropical parasitic diseases and to the training of personnel for these activities. In 1976, a course leading to a Master's degree in Public Health, with emphasis on malaria and other parasitic diseases, was given by the School of Public Health of Mexico, and a similar course is being organized for 1977.

	1977	1978	1979
FUNDS BUDGETED	\$ 78,870	\$ 90,320	\$ 93,580
PER CENT OF TOTAL	.1	.1	.1
PERSONNEL MONTHS	12	12	12
CONSULTANT MONTHS	3	5	3
FELLOWSHIP MONTHS	6	6	9
SUPPLIES AND EQUIPMENT	\$ 15,000	\$ 15,000	\$ 15,000

---- PROJECTS ----

AMRO-0800 SURINAM-0800
ARGENTINA-0800

0900 - VECTOR BIOLOGY AND CONTROL

The control or eradication of vector-borne diseases is mainly dependent on the control of their vectors, intermediate hosts or reservoirs. To be effective, control should be based on the local epidemiological conditions which in most cases depend on the biological and ecological variations of the population of vectors, intermediate hosts and reservoirs.

In particular, this program has the responsibility of promoting, coordinating and assisting Member Countries in the eradication of *Aedes aegypti* and in the control or prevention of dengue, dengue hemorrhagic fever and yellow fever.

It also collaborates with other programs of the Division of Disease Control in the study of the epidemiological problems caused by vector-borne disease; in the design, execution and evaluation of control programs against them; and in the establishment of capabilities for emergency assistance in the event of epidemics of these diseases.

The program promotes, assists and coordinates research efforts of Member Countries to improve epidemiological understanding of problem areas and to test and evaluate new materials, equipment or methods for chemical, biological and genetic control, with particular emphasis on the study of combination of methods in order to maximize their effect and minimize the danger of vector resistance to man and the environment. It also promotes and assists in the training of personnel and disseminates information on the available control methodologies and their indications and limitations, including potential hazards, safety measures, methods of early detection of absorption, and treatment of intoxications.

	1977	1978	1979
FUNDS BUDGETED	\$ 564,335	\$ 604,800	\$ 646,750
PER CENT OF TOTAL	.8	1.0	1.0
PERSONNEL MONTHS	168	168	168
CONSULTANT MONTHS	3	3	3
SUPPLIES AND EQUIPMENT	\$ 22,600	\$ 23,500	\$ 25,350
GRANTS	\$ 10,000	\$ 10,000	\$ 10,000
OTHER	\$ 32,800	\$ 32,945	\$ 32,375

---- PROJECTS ----

AMRO-0900 AMRO-0902
AMRO-0901

1200 - OTHER COMMUNICABLE DISEASES

Gastroenteritis is the leading cause of morbidity and mortality in infants and children throughout Latin America and the Caribbean. Prevention and control requires the collaborative effort of the entire public health team, particularly the pediatrician, nurse, health auxiliary, epidemiologist, sanitary engineer, as well as the public health laboratory. Until recently, only about 30% of diarrhea cases had a defined cause, for example, salmonella, shigella or intestinal parasites. Recent studies, however, indicate that the bulk of cases are caused by enterotoxin-producing *Escherichia coli* or arboviruses. Cholera research also indicates that oral salt solutions can be used to rehydrate patients suffering from gastroenteritis due to other organisms, thereby reducing the clinical severity, morbidity, and mortality due to these conditions.

The project will support seminars introducing current concepts in gastroenteritis prevention and control, the development of norms of epidemiologic surveillance and operation of oral rehydration programs, and the maintenance of cholera surveillance. Assistance will also be available for the planning, implementation and evaluation of oral rehydration pilot projects. Training fellowships will provide personnel of the central public health laboratories with the expertise to diagnose the newly discovered causative agents. Applied research grants are available to promote studies in the etiology of gastroenteritis and the response of the various organisms to oral rehydration schemes.

Plague, typhoid fever, meningococcal disease and nosocomial (hospital-acquired) infections are the most important of the miscellaneous bacterial diseases covered by this project. Plague control involves informational material, consultants and specialized supplies to endemic countries. Fellowships to the WHO Travelling Seminars on Plague are also available.

The program in typhoid fever has concentrated on epidemiologic studies in the pattern of transmission of urban disease in Latin America, epidemic assistance to the Caribbean, and field trials for improved vaccines. PAHO/WHO also cosponsored the International Seminar on Typhoid Fever in Mexico City in November 1976.

Following the PAHO/WHO Seminar on Meningococcal Disease in February 1976, this program's support has been directed towards the development of improved epidemiologic surveillance and laboratory diagnostic services.

The nosocomial infection control program is at the developmental stage. Pilot projects in teaching hospitals are being promoted with the intent of developing simplified surveillance and control systems. It is anticipated that these will rely heavily upon hospital nursing staff education and the enforcement of basic sanitary techniques.

This project recognizes the importance of yellow fever, dengue fever, selected arboviral encephalitis, infant gastroenteritis virus, hepatitis and hemorrhagic fever as viral diseases in the Americas. The activities and recommendation of the PAHO/WHO Scientific Advisory Committee on Yellow Fever, Dengue and *Aedes aegypti* will be supported. A proficiency testing program amongst 16 national virological laboratories for arbovirus, enterovirus and hepatitis B will strengthen this network of laboratories. Investigation will be undertaken on the important new problem of viral diarrhea in infants. The increasing use of blood products with the concomitant increase in hepatitis will be the basis for the program to strengthen hepatitis B diagnostic facilities. Hemorrhagic fever in Bolivia and Argentina continue to be a major threat to the respective countries. The project will coordinate international efforts to develop a reference center, and promote development of vaccines and rodent control programs.

Classic epidemic louse-borne typhus remains a problem in the high plateau areas of Guatemala, Ecuador, Peru and Bolivia, where over 4,000 cases have been reported in the last decade. The project funds will primarily support laboratory diagnostic facilities in the four countries, emphasizing the immunofluorescent antibody and complement fixation tests. The surveillance of louse resistance to insecticides will be continued. Further pilot trials with attenuated type E vaccine are planned for two countries in the Region.

Both the III and IV International Conferences on the Mycoses identified areas in which PAHO/WHO could provide technical assistance in fungal diseases. Initially, this new project will be closely coordinated with AMRO-0400 (Tuberculosis Control), and concentrate on the systemic mycoses of public health importance, particularly those which produce pulmonary disease. The most important of these are histoplasmosis, coccidioidomycosis, and blastomycosis. Priority will be given to epidemiologic assistance in determining the prevalence of pulmonary mycoses, supplies necessary for field investigations of fungal disease, and fellowships to improve the laboratory diagnosis of pulmonary mycoses.

The major preventable causes of blindness are trachoma, onchocerciasis, keratomalacia, glaucoma, cataracts and eye trauma. "Prevention of Blindness" was the theme of World Health Day in 1976. The International Association for the Prevention of Blindness (IAPB) has now embarked on a global fund-raising campaign, the proceeds of which will go to pilot projects demonstrating that blindness can be substantially reduced in a cost-effective fashion.

This new project will promote the prevention of blindness in the Americas through support of existing innovative programs and assistance to Member Countries which wish to develop IAPB-sponsored or independent projects. Initially, the concentration will be on documenting the seriousness and prevalence of preventable blindness. Later efforts will involve training in the diagnosis and control of trachoma and onchocerciasis.

	1977	1978	1979
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FUNDS BUDGETED	\$ 159,260	\$ 177,500	\$ 196,980
PER CENT OF TOTAL	.2	.3	.3
PERSONNEL MONTHS	24	24	24
CONSULTANT MONTHS	18	18	18
FELLOWSHIP MONTHS		6	6
SEMINARS AND COURSES	\$ 7,000	\$ 7,200	\$ 7,500
SUPPLIES AND EQUIPMENT	\$ 15,500	\$ 17,500	\$ 18,900
GRANTS	\$ 11,000	\$ 11,000	\$ 12,000
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	PROJECTS		
AMRO-1200	AMRO-1203		AMRO-1275
AMRO-1201	AMRO-1204		
AMRO-1202	AMRO-1273		

1300 - MATERNAL AND CHILD HEALTH AND FAMILY WELFARE

In the majority of the countries of the Americas there are still high morbidity and mortality rates among the groups which are biologically most vulnerable. These groups include mothers and children in large sectors of the population.

The Region's health policy in this regard includes both the expansion of coverage for the respective programs, especially in rural and peri-urban areas, and the provision of services which include integrated preventive and curative activities. If appropriate, these activities could include fertility regulation. This policy must be carried out as part of the promotion of family health and should bear in mind the most serious specific biomedical and social risks which can affect both the individual and certain sectors of the community.

PAHO/WHO cooperates with the countries of the Region in identifying family health problems and in formulating plans and programs for the establishment of effective maternal and child health care systems with a view to rapid implementation and evaluation. Special importance is given to the development of relevant human resources including nurse-midwives and auxiliary personnel and to the promotion of research, mainly that concerning operational aspects. In developing the above-mentioned programs, high priority is given to the active and essential participation of the community, especially women and youth. The crucial role and potential for leadership of these two groups in the implementation of activities for the protection of family health are extremely important.

Lastly, PAHO/WHO aids in the search for and efficient use of financial resources from various sources, agencies and institutions. Special mention should be made in this regard of UNFPA, UNICEF, AID and the Kellogg Foundation.

The tasks described above are carried out by the Division of Family Health in close cooperation with other PAHO/WHO Divisions. Technical assistance is provided to those countries requesting it, and national intersectoral cooperation is encouraged when this is needed.

	1977	1978	1979
FUNDS BUDGETED	\$ 7,811,898	\$ 6,333,821	\$ 4,898,341
PER CENT CF TOTAL	11.1	10.2	7.8
PERSONNEL MONTHS	593	588	534
CONSULTANT MONTHS	95	86	35
FELLOWSHIP MONTHS	334	258	168
SEMINARS AND COURSES	\$ 1,174,117	\$ 784,686	\$ 564,887
SUPPLIES AND EQUIPMENT	\$ 1,868,490	\$ 1,671,808	\$ 1,093,997
GRANTS	\$ 68,645	\$ 20,000	\$ 20,000
OTHER	\$ 2,650,454	\$ 1,696,194	\$ 1,267,064

--- PROJECTS ---

AMRO-1310	BELIZE-1300	PANAMA-1301
AMRO-1320	BOLIVIA-1300	PARAGUAY-1300
AMRO-1330	BRAZIL-1301	PERU-1300
AMRO-1331	CHILE-1302	PERU-1301
AMRO-1360	CHILE-1303	URUGUAY-1300
AMRO-1300	CHILE-1304	VENEZUELA-1300
AMRO-1312	COLOMBIA-1300	WEST INDIES-1301
AMRO-1370	CUBA-1300	WEST INDIES-1302
AMRO-1373	ECUADOR-1300	WEST INDIES-1303
AMRO-1376	GUATEMALA-1301	WEST INDIES-1304
AMRO-1379	HAITI-1300	
ARGENTINA-1301	MEXICO-1300	

1400 - NUTRITION

Nutrition deficiencies are prevalent in most countries of the Region, particularly in rural areas and marginal populations of the growing metropolis.

The presence of nutritional diseases, mainly protein-energy malnutrition, is accompanied by high mortality and morbidity rates in children under five years of age; the prevalence of grades II and III malnutrition ranges from 10 to 35% in this age group.

Nutritional anemias in pregnant women ranges from 22 to 63%, mainly due to iron and folate deficiencies. Endemic goiter affects approximately 13 million people in the Andean area, and in 20 countries its prevalence is over 10%, very often associated with cretinism. Low vitamin A serum level in the general population ranges between 2 and 45%, and in some countries where the prevalence of protein-energy malnutrition is high, 14% of malnourished children under five years of age present eye lesions or xerophthalmia. The prevalence of diabetes mellitus in the general population ranges from 11 to 58 per 1,000.

The synergism of malnutrition and infectious diseases affects the child's physical growth and is frequently associated with serious impairment of mental and intellectual development.

It is also recognized that nutritional status has a specific effect on the capacity of the individual for physical work, both in terms of intensity and duration.

There are many factors determining the nutrition problem which are present in various areas of national development and not exclusively in the health sector. This multicausation is related in one way or another to three basic components: availability of food, balanced diet, and diseases interfering with the proper utilization of nutrients or which cause an excessive loss of them.

Whereas outside the health sector the most important factors affecting the nutritional status of the population are purchasing power, production and effective consumption of food, and consumer education, within the sector the most important factors are the high prevalence of infectious diseases, insufficient environmental sanitation and malnutrition.

In view of the existing nutritional problems and constraints, the overall purpose of this program is to assist Member Governments in carrying out programs for the reduction of malnutrition and the promotion of an optimum nutritional status for the population. More specifically, high priority will be given in the implementation of the nutrition program, to strengthening and expansion of nutrition activities in primary health services as an integral part of family health care; surveillance of the nutritional status of the population and especially of the groups most at risk, i.e., mothers and children; establishment of preventive measures for the control of specific nutritional diseases, e.g., salt iodization, sugar fortification with vitamin A, production of high nutritious foods for children; strengthening of food services in hospitals, schools, day nurseries and other institutions; nutrition training of professional, intermediate-level and auxiliary personnel for the health services and other sectors such as education and agriculture; design and implementation of comprehensive studies on food and nutrition problems, ranging from biochemical and metabolic research through sociological and behavioral studies at the community level; and formulation and implementation of biologically oriented food and nutrition policies.

	1977	1978	1979
FUNDS BUDGETED	\$ 5,959,692	\$ 5,355,172	\$ 5,176,727
PER CENT CF TOTAL	8.5	8.6	8.2
PERSONNEL MONTHS	4746	4334	4098
CONSULTANT MONTHS	43	32	31
FELLOWSHIP MONTHS	796	716	682
SEMINARS AND COURSES	\$ 133,965	\$ 45,000	\$ 56,500
SUPPLIES AND EQUIPMENT	\$ 710,078	\$ 444,431	\$ 393,289
GRANTS	\$ 11,348	\$ 13,424	\$ 8,500
OTHER	\$ 1,186,242	\$ 1,107,371	\$ 1,065,705

---- PROJECTS ----

AMRO-1410
AMRO-1440
AMRO-1400
AMRO-1401
AMRO-1411
AMRO-1430
AMRO-1472

AMRO-1474
AMRO-1479
ARGENTINA-1400
BOLIVIA-1400
BOLIVIA-1401
BRAZIL-1400
CHILE-1400

ECUADOR-1402
GUYANA-1400
HAITI-1400
VENEZUELA-1400
WEST INDIES-1400

1500 - MENTAL HEALTH

Available indicators on the state of mental health in the Region show that mental health problems are increasingly important. Among these indicators are violent deaths, the number of abandoned children, and alcoholism and drug dependence rates. These indicators have reached great proportions in the Region and have a negative effect on the stability of mental health in the family and on the individual's ability to function in his social environment.

Most of the governments have taken note of the situation and have created mental health offices at the ministerial level, but these programs are generally in the initial stages and services are limited to providing care in institutions and some out-patient services.

The mental health services infrastructure is generally deficient in most countries and is characterized by poor distribution and lack of qualified personnel and obsolete buildings. There are no specific services for promoting the psychological welfare of the family, especially that of high-risk members such as children and adolescents.

The mental health program provides support for the governments in developing mental health activities. More specifically, aid is provided in defining policies and strategies and in designing special programs for extending services to the groups which lack such services, especially the high-risk groups.

Problems confronted by the adolescent and the young adult, especially failing in school, problems at work, alcoholism and drug dependence, are aspects in which cooperation with the governments acquires a special importance.

Epidemiological research on mental illness and clinical and operational research on mental health care systems are being encouraged in order to improve the effectiveness of the services, disseminate technical information, promote the development of human resources, and encourage community participation.

	1977	1978	1979
FUNDS BUDGETED	\$ 274,215	\$ 270,878	\$ 292,565
PER CENT OF TOTAL	.4	.4	.5
PERSONNEL MONTHS	72	72	72
CONSULTANT MONTHS	9	5	7
FELLOWSHIP MONTHS	24	24	21
SEMINARS AND COURSES	\$ 12,000	\$ 15,000	\$ 9,250
SUPPLIES AND EQUIPMENT	\$ 12,268	\$ 5,000	\$ 1,800
OTHER	\$ 35,500	\$ -	\$ -

---- PROJECTS ----

AMRO-1500
AMRO-1575
AMRO-1581
AMRO-1583

ARGENTINA-1500
JAMAICA-1500
PERU-1500
URUGUAY-1500

WEST INDIES-1500

1600 - DENTAL HEALTH

Dental diseases, especially dental caries, are prevalent throughout the Region. Limited studies made of schoolchildren reveal that 95% suffer from these diseases. Preventive programs for dental caries are limited and the coverage of such programs needs to be extended. There is also a severe shortage of professional dental personnel as well as inequitable distribution of dentists between urban and rural areas. The dentist/dental auxiliary ratio is about 3 to 1.

The overall objective of this program is to assist the countries of the Region in achieving the objectives and goals for dental health outlined in the Ten-Year Health Plan for the Americas.

Specific program activities include development of suitable methodology to determine current status of dental health programs; promotion of activities to increase knowledge related to the prevalence and incidence of oral disease; and definition of principles and preparation of regional policies in dental health, including policies regarding the preparation and utilization of dental personnel. Emphasis will be placed on the development of preventive dental health programs, particularly in the area of fluoridation. Activities will include preparation of guidelines and methodology to achieve fluoridation in cities of 50,000 or more population and utilization of alternative methods of prevention where water fluoridation is not possible. Assistance will also be provided to strengthen the delivery of dental health services to urban and rural populations and to improve the dental health components of maternal and child health programs.

Development of dental health manpower, including training programs for professional and auxiliary personnel, will be promoted. Assistance will also be provided in the development of dental education programs for incorporation into school and community education programs. Other program activities will include promotion of research in priority areas, particularly the development of effective preventive materials against dental caries; promotion of the manufacture of simplified dental equipment for use at local levels in country programs; and selection and dissemination of pertinent information.

	1977	1978	1979
FUNDS BUDGETED	\$ 305,523	\$ 341,920	\$ 402,175
PER CENT OF TOTAL	.4	.5	.6
PERSONNEL MONTHS	60	72	72
CONSULTANT MONTHS	20	14	21
FELLOWSHIP MONTHS	15	30	36
SEMINARS AND COURSES	\$ 11,000	\$ 13,500	\$ 7,750
SUPPLIES AND EQUIPMENT	\$ 31,645	\$ 33,800	\$ 38,000
GRANTS	\$ 16,247	\$ -	\$ -
OTHER	\$ 25,007	\$ -	\$ -

---- PROJECTS ----

AMRO-1600	AMRO-1676	MEXICO-1600
AMRO-1670	AMRO-1677	MEXICO-1602
AMRO-1671	ARGENTINA-1600	PERU-1600
AMRO-1672	DOMINICAN REPUBLIC-1600	
AMRO-1673	DOMINICAN REPUBLIC-1601	
AMRO-1674	GUYANA-1600	

1700 - CHRONIC DISEASES

The importance of cardiovascular diseases, cancer, diabetes mellitus and other chronic diseases in this Region is growing because of better control of communicable diseases, the increase in life expectancy at birth, and the cultural and environmental changes associated with rapid urbanization and increasing industrialization.

The impact of these factors naturally varies from country to country in the Region. Thus, for example, in 10 large urban centers in Latin America diseases of the heart and arteries, in addition to other diseases which have a prolonged course, such as cancer, diabetes, neurological diseases, high blood pressure, cirrhosis of the liver and gallbladder disease, accounted for two-thirds of all deaths in the population in the 15-74 year age group. However, mortality from cardiovascular diseases in 26 countries of the Region shows a wide spread - from 2.9 to 43.8% - and that of cancer ranges from 2.1 to 21.5%.

It is, therefore, to be expected that the countries will concentrate more on this problem in their health programs. The Organization must be prepared to cooperate with the Country Representatives and the Area Offices in the advisory services that should be provided for the governments in planning and implementing control programs for these diseases as indicated in the Ten-Year Health Plan for the Americas.

Some countries, for example, Argentina, Brazil, Chile, Colombia, Cuba and Venezuela, have already organized technical units for noncommunicable chronic diseases in their ministries of health, while in other countries such units are just being organized. These units are responsible for framing policies and standards in this program area and fulfill an important need in those countries in which the magnitude of the problem justifies their existence.

In most of the countries of the Region, no representative data on the prevalence and distribution of the various diseases that make up the noncommunicable chronic group are available. Consequently, a common objective of the programs for control of these diseases is to gain a better understanding of the magnitude and characteristics of the problem, as indicated in the Ten-Year Health Plan for the Americas and Resolution XXIV of the XXIII Meeting of the Directing Council of PAHO/WHO.

The different morbid factors in this group of diseases have similarities that make it possible to identify other common objectives: to reduce the incidence of preventable diseases; to promote early diagnosis and treatment and the progressive and continuing care of patients; to meet the spontaneous demand in both urban and rural areas; to train personnel at all levels; to carry out epidemiological, clinical and operational research; and to provide community education.

The purpose of the prevention component is the primary or secondary prevention of diseases for which effective measures are available, such as rheumatic fever and rheumatic heart disease, diabetes mellitus, cervical cancer and cirrhosis of the liver. In some cases, such as coronary atherosclerosis, encephalitic vascular diseases, chronic bronchopulmonary affections (chronic bronchitis, asthma, emphysema, pneumoconiosis) and lung cancer, it is important to recognize and take action on risk factors that can sometimes be controlled, such as diet, high blood pressure, obesity and cigarette smoking, among others.

Early detection is important in cancer control programs, especially in breast and cervical cancer, as well as in diabetes mellitus, high blood pressure and high-risk coronary heart disease cases.

Integrated care and rehabilitation of the chronic patient must be carried out on an epidemiological, clinical and social basis, and activities must be aimed at interrupting the natural history, origin and different phases of the evolution of the disease. Prevention, assistance and rehabilitation are inseparable and require the coordinated participation of a large number of services and institutions that must be organized into a regional system of progressive care.

The purpose of personnel training is to enable the persons needed to effectively carry out program activities. Maximum use must be made of medical personnel, especially medical auxiliaries, nursing personnel, social workers and rehabilitation technicians.

The research component deals primarily with clinical and epidemiological research and the transfer of technology that will make it possible to effectively utilize available medical knowledge in providing community health care.

The very nature of these diseases demands the coordinated support of different health services and the participation of professional and technical personnel of different disciplines in addition to the use of expensive diagnostic technologies and therapy. Accordingly, the possibilities of making integrated use of the knowledge available in control measures will depend essentially in each country on the capacity, quality and efficiency of the health and medical care systems and on the coordination between the different services that are required for these purposes.

The organization of progressive patient care and the regionalization of health services are basic to the provision of early, appropriate and continuing medical care of chronic patients.

Within the Organization's system of programs there are two levels of activities for providing assistance to the countries: 1) direct assistance which has generally been directed towards cooperation with the public health administrations in assigning priorities, defining program areas, and rationally planning control programs in those countries in which the magnitude of the problem justifies such assistance. These advisory services require coordination and cooperation with other parts of

the Organization which are in some way related to these programs. This is the case with diagnostic laboratories, radiodiagnosis, radiotherapy and rehabilitation. This makes possible a flow of assistance to the countries involving all of the Organization's resources in an act of spontaneous coordination which results from the formulation of all the countries' needs, and 2) intercountry programs that are important in this stage of the development of chronic disease control programs since their purpose is to demonstrate the feasibility and effectiveness of epidemiological studies and of preventive and therapeutic measures with a view to extending coverage, both at the national and the regional levels.

The program areas have been chosen because they represent diseases for which it is necessary to obtain a better understanding of the magnitude and distribution of the problem, and especially because methods of prevention and treatment which have proven to be effective are available for these diseases. Seven countries (Argentina, Bolivia, Brazil, Chile, Ecuador, Peru and Venezuela) are participating in a cooperative program for the prevention of rheumatic fever. Nine countries (Argentina, Bolivia, Brazil, Chile, Cuba, Ecuador, Mexico, Peru and Venezuela) are taking part in a program for the control of high blood pressure on the basis of a common protocol drawn up by the Organization and adopted jointly by the participating countries. The English-speaking countries of the Caribbean are setting up a joint system for recording cases of diabetes mellitus. This was prepared by the Organization as the first stage in a control program approved by the last Conferences of Ministers of Health of the Caribbean. Nine countries (Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico, Peru, Uruguay and Venezuela) are participating in a system for providing information on existing research and resources in cancer in order to identify program areas, priorities and cooperative projects. This program, in which BIREME and the National Cancer Institute of the United States of America are participating, is in line with the recommendations in Resolution XXIV of the XXIII Directing Council of the Organization and with the recommendations contained in three resolutions of the World Health Assembly (WHA26.61, WHA27.63 and WHA28.85) on long-term planning of international cooperation in cancer research.

	1977	1978	1979
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FUNDS BUDGETED	\$ 390,656	\$ 329,210	\$ 241,090
PER CENT OF TOTAL	.6	.5	.4
PERSONNEL MONTHS	79	70	48
CONSULTANT MONTHS	13	10	9
FELLOWSHIP MONTHS	21	12	18
SEMINARS AND COURSES	\$ 42,745	\$ 22,650	\$ 11,390
SUPPLIES AND EQUIPMENT	\$ 25,921	\$ 26,356	\$ 16,300
GRANTS	\$ 8,000	\$ 8,000	\$ 8,000
OTHER	\$ 40,350	\$ 28,549	\$ -
---- PROJECTS ----			
AMRO-1700	CHILE-1700	VENEZUELA-1700	
AMRO-1776	PARAGUAY-1700		
AMRO-1779	PERU-1700		
ARGENTINA-1700	URUGUAY-1700		

Environmental Health Services

2000 - PROGRAM PLANNING AND GENERAL ACTIVITIES

The environmental health program will emphasize planning and programming at the national level, particularly countrywide programs for basic sanitary measures integrated into overall national development plans; the selection of priority areas for action; and the setting of objectives and targets and evaluation of alternative methods for reaching them.

Program development will continue to be guided by the Ten-Year Health Plan for the Americas and the WHO Programme of Work, as well as by resolutions of the Governing Bodies of the Organization.

Attention will be given to developing broad environmental health policies; national planning; the finding of solutions to the persistent lack of water supply and sanitation in rural and urban fringe areas; the operation and maintenance of water systems; solid waste management; the health aspects of housing; the promotion of the health of workers in both agriculture and industry and the prevention of ill-health resulting from conditions in the working environment; radiation protection; the control of air, water and soil pollution; the health and ecological effects resulting from development projects; and the development of technical criteria.

Steps will be taken to move from a project-by-project approach to national environmental health programs in key fields. This approach should lead to the establishment of comprehensive environmental health programs and their integration into national development planning. Attention will also be given to development of community participation and self-reliance.

	1977	1978	1979
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FUNDS BUDGETED	\$ 2,863,583	\$ 2,570,445	\$ 2,804,553
PER CENT OF TOTAL	4.1	4.2	4.4
PERSONNEL MONTHS	768	732	744
CONSULTANT MONTHS	88	46	44
FELLOWSHIP MONTHS	221	177	204
SEMINARS AND COURSES	\$ 46,658	\$ 30,800	\$ 22,100
SUPPLIES AND EQUIPMENT	\$ 211,355	\$ 35,155	\$ 38,450
GRANTS	\$ 10,800	\$ 11,000	\$ 11,250
OTHER	\$ 116,722	\$ 78,126	\$ 72,104

---- PROJECTS ----

AMRO-2010	BRAZIL-2041	NICARAGUA-2000
AMRO-2020	CHILE-2000	PANAMA-2000
AMRO-2030	COLOMBIA-2000	PARAGUAY-2000
AMRO-2000	COSTA RICA-2000	PERU-2000
AMRO-2070	HEADQUARTERS	SURINAM-2000
AMRO-2071	DOMINICAN REPUBLIC-2000	TRINIDAD AND TOBAGO-2000
ARGENTINA-2000	ECUADOR-2000	URUGUAY-2000
BAHAMAS-2000	EL SALVADOR-2000	UNITED STATES OF AMERICA-5101
BARBADOS-2000	GUATEMALA-2000	VENEZUELA-2000
BOLIVIA-2000	HONDURAS-2000	
BRAZIL-2000	JAMAICA-2000	
BRAZIL-2040	MEXICO-5101	

2100 - WATER SUPPLY AND EXCRETA DISPOSAL

The objective of this program is to provide assistance to Member Governments in the development, improvement and coordination of their financial, technical and human resources into long-range solutions for alleviating those problems which delay the attainment of the national goals for water supply and excreta disposal.

Principal problems which have been identified by the countries include the increasing degradation of drinking water quality; the inequitable coverage provided to users; the need to redirect sector emphasis to include a higher percentage of house connections; the need for more cost-effective solutions; the rapid expansion of systems without concurrent improvement of infrastructure; the absence of practical guidelines for the planning and management of water supply and excreta disposal programs; and the need to intensify sector coverage. These problems are magnified when considered in the context of rural and urban fringe areas.

Serving as a focal point and catalyst, PAHO/WHO, through this program, will assist the countries in accelerating their efforts to raise the coverage of urban and rural water supply and excreta disposal programs in order to decrease the gaps between existing levels of coverage and those defined in the Ten-Year Health Plan. Concurrently, emphasis will be placed on identifying and reducing existing and potential dangers to water quality through improved operation and maintenance.

PAHO/WHO's efforts in assisting the countries to accelerate the delivery of community sanitation services will also serve to advance national environmental health plans through the stimulation, formulation, and implementation of activities which are elements of these plans.

Recognizing that the escalating problems require accelerated efforts, PAHO/WHO will emphasize the determination of priorities as a prerequisite to the equitable provision of safe, potable water and to the effective removal and disposal of excreta. Through its systematized collection of basic data covering these services, it will assist the countries in the reliable definition of national objectives and priorities in order that planned approaches can be developed for improving drinking water quality as well as quantity.

This program will serve as a channel for the provision of technical guidance in the development of cost-effective water supply and distribution systems and wastewater disposal systems; the development of technology suitable for use in the countries of the Region; the control of pollution of water resources; and the financing of water supply and sanitation programs. In order to achieve these objectives, PAHO/WHO will continue to maintain contacts with professional and research organizations as well as with the various international lending agencies while also exploring new sources of program financing.

The program will emphasize that the improvement of the operational capacity of the water and sewerage agencies should be on an integral basis. Assistance will be provided in the development of the technical, financial, administrative and institutional aspects of the agencies' working organization and planning capabilities. Manpower development will play a very important role in this process.

	1977	1978	1979
FUNDS BUDGETED	\$ 2,349,309	\$ 899,536	\$ 801,162
PER CENT OF TOTAL	3.3	1.4	1.3
PERSONNEL MONTHS	592	507	288
CONSULTANT MONTHS	143	24	25
FELLOWSHIP MONTHS	337	29	18
SEMINARS AND COURSES	\$ 13,576	\$ 4,000	\$ 5,750
SUPPLIES AND EQUIPMENT	\$ 41,343	\$ 21,920	\$ 9,000
GRANTS	\$ 10,800	\$ 1,000	\$ 1,250
OTHER	\$ 221,653	\$ 17,596	\$ 39,000

---- PROJECTS ----

AMRO-2070	COSTA RICA-2100	HONDURAS-2102
AMRO-2100	DOMINICAN REPUBLIC-2101	JAMAICA-2100
AMRO-2172	ECUADOR-2103	JAMAICA-2103
AMRO-2173	HAITI-2100	MEXICO-2100
AMRO-2174	HAITI-2101	PERU-2100
BARBADOS-2100	HAITI-2102	TRINIDAD AND TOBAGO-2100
BOLIVIA-2102	HAITI-2103	URUGUAY-2100
BRAZIL-2101	HONDURAS-2100	WEST INDIES-2101
COLOMBIA-2100	HONDURAS-2101	

2200 - SOLID WASTES

The collection and disposal of solid waste in the Region constitutes a growing problem that requires urgent attention. Besides direct health effects on the urban population, serious pollution of air, water and soil is produced. Economic losses are experienced due to the creation of nuisances and unsightly sites resulting from unsanitary handling of solid waste. The limited data gathered in the last 10 years shows that solid waste practices have not been satisfactory in the Region. Studies in several countries confirm that administration and management of the services are generally deficient, collection and disposal methods are not up to date with known technology, and most of the personnel is untrained and unprepared for its assigned tasks. In most countries about 75% of the urban population has daily solid waste collection, but final disposal in most cases is in open dumps; forms of sanitary landfill and incineration are used in some larger cities.

The Ten-Year Health Plan for the Americas established as a goal the installation of adequate systems for the collection, transport, treatment, and disposal of solid waste in at least 70% of the cities with 20,000 population or more within the decade. Many of the countries have adopted the goals and the strategy of the Ten-Year Health Plan for the Americas.

The main objective of the PAHO/WHO program is to cooperate with the countries in finding solutions for preventing or reducing the adverse effects of unsanitary handling of solid wastes. To reach this objective PAHO/WHO intends to increase its technical capabilities and to utilize regional, area and country level resources, including those of CEPIS.

Through this program PAHO/WHO will stimulate the development of basic policies and legislation on solid waste management leading to the formulation of national plans in coordination with national and regional development plans; assist in the establishment or improvement of national agencies for solid waste management; assist in the training of personnel through regional courses and symposiums for Spanish-speaking and English-speaking countries of the Region; promote, plan and initiate institutional development projects for solid waste management in cities or metropolitan areas; assist countries in the formulation and submission of projects to international lending agencies; and promote the preparation and development of applied research projects on solid waste to simplify processes and reduce costs.

	1977	1978	1979
FUNDS BUDGETED	\$ 59,335	\$ 94,200	\$ 147,700
PER CENT OF TOTAL	.1	.1	.2
PERSONNEL MONTHS	20	30	36
CONSULTANT MONTHS		4	5
SUPPLIES AND EQUIPMENT	\$ -	\$ 6,000	\$ 15,340
---- PROJECTS ----			
AMRO-2030 AMRO-2070	BARBADOS-2200 HAITI-2200		

Environmental Pollution

2300 - PROGRAM PLANNING AND GENERAL ACTIVITIES

The objective of this program is to assist the countries in preventing or reducing the effects on human health and well-being of actual and potential pollutants and hazards, including biocides, especially in air, water, soil and food.

The control of environmental pollution stemming from industrial and urban activities is gradually becoming an important environmental health problem in the Region, although basic environmental sanitation conditions continue to demand the greatest attention. Most countries of the Region are experiencing rapid growth of industrialization and urbanization, with important technological changes, consequent pollution of air, water, soil and food resources, and related problems for human health. At present there are some 15 cities and metropolitan areas in Latin America and the Caribbean with over one million people and a combined population of more than 50 million. All face environmental pollution problems to varying degrees.

Technical cooperation has been provided by PAHO/WHO to the countries of the Region, utilizing the resources of CEPIS and more recently of the Center for Human Ecology and Health (ECO). The CEPIS program includes the Pan American Air Pollution Sampling Network, which was initiated in 1967 and now has 93 stations operating in the major cities of 15 countries. It also includes the regional program for analytical quality control of drinking and waste water analysis laboratories, comprising selection and application of methods for analysis, training of personnel, calibration of equipment and instruments, and internal control of analysis quality. Fifty laboratories in 20 countries are associated with this program. Highly technical regional air and water pollution control courses are being carried out by CEPIS. Comprehensive studies of water quality and river basin planning have been conducted in several countries. Integrated projects for air, water and soil pollution control, health effects studies, and training of staff are being implemented with UNDP support in Brazil, Mexico and Venezuela; and projects dealing with specific aspects of pollution prevention and control are being implemented in several countries with their own resources and in some cases with PAHO/WHO cooperation. Collaboration with UNEP has been initiated, particularly for activities being carried out by ECO and CEPIS.

The program will continue to provide systematic and coordinated assistance, utilizing the resources of CEPIS and ECO. The Pan American Air Pollution Sampling Network will be extended and integrated with the WHO Air Pollution Monitoring Network. The Laboratory Quality Control Program will be expanded, and a water pollution monitoring network will be initiated. The PAHO/WHO Regional Environmental Information Network will be strengthened, using CEPIS and ECO as its main focal points. Assistance in the development of projects for environmental pollution control, including planning, identification of sources of financing and project implementation, will be provided. ECO will study the health effects of environmental origin, assess actual and potential health problems resulting from developing projects, formulate health criteria, provide assistance in their application, and train staff.

The program will give priority to regional and country activities, with special emphasis on the development of environmental pollution control policies and legislation; to the formulation and strengthening of plans for environmental preservation and pollution control; and to the training of technical and administrative staff in accordance with the needs and resources of the countries.

	1977	1978	1979
FUNDS BUDGETED	\$ 817,730	\$ 605,651	\$ 766,235
PER CENT OF TOTAL	1.2	1.0	1.2
PERSONNEL MONTHS	163	204	264
CONSULTANT MONTHS	70	32	23
FELLOWSHIP MONTHS	101	46	3
SEMINARS AND COURSES	\$ 12,862	\$ 7,000	\$ 15,000
SUPPLIES AND EQUIPMENT	\$ 125,857	\$ 33,420	\$ 44,725
GRANTS	\$ 20,000	\$ 3,000	\$ 10,000
OTHER	\$ 35,575	\$ 31,545	\$ 45,900

--- PROJECTS ---

AMRO-2070	BRAZIL-2340	MEXICO-2301
AMRO-2300	BRAZIL-2341	VENEZUELA-2300
AMRO-2600	MEXICO-2300	

2400 - AIR POLLUTION

The basic objective of this program is to cooperate with the Member Countries to assure that each one has an agency capable of developing air pollution evaluation, prevention and control activities as determined by the problem, the level of socio-economic development, and the operational possibilities for the programs in each country. In previous years, PAHO/WHO has contributed to the development of these agencies in various countries. The greatest difficulty in increasing the number of such agencies is the lack of well-trained technical personnel. In order to reduce this shortage, a workshop on the administration of air pollution control programs is being planned. This will be held at CEPIS headquarters in Lima, Peru, in 1977. During this workshop, discussions will be held on existing problems in several important countries of the Region. Appropriate solutions for specific problems will be presented and approximately 30 professionals will be trained. In addition, as a result of the course, it is hoped to produce a publication which presents the most appropriate solutions for the different levels of development in these countries and which discusses the present situation and future possibilities for Latin America. This publication should serve as a manual for program administration in the Region.

Later, as the budget permits, the course will hopefully be repeated in order to increase the number of trained professionals and to extend this activity to the English-speaking countries.

The Pan American System of Air Pollution Samples (REDPANAIRE) now has more than 100 stations in 30 cities in 15 different countries which continue to record the level of pollution in the most important cities. In 1977, it is expected to increase the number of stations and cities in the system and to prepare a new consolidated report analyzing the results obtained during the first 10 years of operation of REDPANAIRE, 1967-1976. A comparison of the levels of pollution in the different cities and an analysis of the tendencies exhibited by the concentrations will contribute to a better understanding of the problem and will aid in preparing suitable prevention and control programs.

Direct advisory services will still be provided to the countries for developing programs already in operation and for their expansion, as well as for beginning new programs wherever necessary. Cooperation will be provided in formulating prevention and control programs in order to reach this objective and for training specialized personnel. The information requested by the countries will be provided with the aid of the documentation resources of CEPIS.

Only sporadic activities have been developed in the research field. PAHO/WHO has supported different programs, but the lack of resources and especially the lack of a sufficient number of trained personnel make expansion very difficult. However, it is essential for the countries to be aware of the real magnitude of their problems, to investigate preventive and control measures which are suited to their specific characteristics, and to examine control methods used in the more developed countries in order to be able to decide which are the most suitable and applicable under prevailing conditions. PAHO/WHO hopes to continue providing support for research in these fields in order to intensify the efforts which have been carried out in the Region up to the present time.

	1977	1978	1979
FUNDS BUDGETED	\$ 8,510	\$ 7,055	\$ 8,060
PER CENT OF TOTAL	-	-	*
FELLOWSHIP MONTHS	3	3	3
SEMINARS AND COURSES	\$ 3,500	\$ 2,000	-
SUPPLIES AND EQUIPMENT	\$ 2,700	\$ 2,400	\$ 5,000

--- PROJECTS ---

PERU-2400

2500 - RADIATION AND ISOTOPES

The objectives of this program are to secure the optimum use of radiation in medicine and to eliminate excessive or unnecessary exposure to radiation of patients, workers and the general public.

In developed countries, from one-third to one-half of all crucial medical decisions depend on radiological information. However, the majority of people, particularly in the rural areas of Latin America and the Caribbean, do not have access to this most valuable diagnostic tool.

The problem is partly due to the lack of trained technicians who often have to cope with very sophisticated equipment which is prone to breakdown. Preliminary studies have shown that a few countries in Latin America have the capability to produce rugged, inexpensive, easily installed and operated diagnostic X-ray equipment.

Schools of X-ray technicians are few in number and of varying quality. Textbooks and teaching aids are inadequate; guidelines for the rational planning, building, equipping, staffing and operating of X-ray departments at all levels of medical care are urgently required. Strong quality assurance standards are also needed to avoid waste of effort, materials and equipment and unnecessary radiation exposure to patients. Many patients, workers and members of the public are exposed to unnecessarily high radiation doses due to the use of diagnostic X-ray equipment. In industry and agriculture, the use of high intensity radiation sources has resulted in accidents. Radioactive fallout due to nuclear weapons testing continues to add to the human radiation dosage. Nuclear reactors for research and for power have been constructed in several countries of Latin America and it has been estimated that onward from 1985 approximately 70% of new electrical generating capacity in the Region will be nuclear. In many countries there are no radiation protection services, and in others they are very rudimentary.

The III Special Meeting of Ministers of Health of the Americas recommended to "provide a basic radiation protection program in each country of the Region." In addition, public health officials will have to play an ever-increasing role in the selection and approval of locations for nuclear facilities, evaluation of radiation effects, and management of radiation accidents and radioactive wastes.

PAHO/WHO efforts are directed towards training professional and technical personnel and developing adequate teaching materials; stimulating the production of suitable radiographic equipment; conducting quality assurance surveys; and providing some supplies and equipment and advisory services as requested.

	1977	1978	1979
FUNDS BUDGETED	\$ 125,685	\$ 139,300	\$ 153,960
PER CENT OF TOTAL	.2	.2	.2
PERSONNEL MONTHS	36	36	36
CONSULTANT MONTHS	2	4	4
FELLOWSHIP MONTHS		3	3
SEMINARS AND COURSES	\$ 2,000	\$ -	\$ -
SUPPLIES AND EQUIPMENT	\$ 4,100	\$ 4,700	\$ 5,500
OTHER	\$ 1,500	\$ 1,500	\$ 2,000

--- PROJECTS ---

AMRO-2500
AMRO-2570

AMRO-2571
PERU-2500

2900 - REGIONAL DEVELOPMENT

River basins are in many cases suitable geographic areas for regional development programs because the river system is a physical linkage factor which, as long as it is not too extensive, facilitates communication and joint action. Programs for the development of river basins as multipurpose projects appeared in Latin America several years ago. In most cases, health authorities have been successful in assuring that health aspects be considered in the different programs. At the present time, studies on a series of development plans for river basins and other regional development plans are in the completion stage. In these studies it is necessary to define quantitatively the needs of the health sector, evaluate the impact of the projects on health, and determine the costs and benefits of the measures which must be implemented in order to avoid damaging the environment and man's health.

It is hoped that solutions for regional, physical, social and economic problems will contribute not only to improvements in rural areas but will also help to reduce problems for urban inhabitants. Determining the total demand for health services and the possibility of providing these services is, therefore, a basic element in any viable plan for regional development.

The objective of this program is to cooperate with the countries in planning the utilization of available space through the rational use of natural resources, mainly water resources, and by protecting the quality of life and of the environment. The strategy for attaining this objective is to strive for direct participation of the health sector in relevant aspects of regional development and to prepare feasibility studies for the health sector which provide effective support for development. The strategy also includes the promotion, support and implementation of programs for training professionals in environmental aspects, with special attention on the development and adaptation of new technologies; the establishment of close contacts with planners in order to provide them with the information on health and environmental engineering required in overall planning and to encourage information programs to obtain public support for the inclusion of relevant health aspects in development projects; and the establishment of marginal costs for the expansion of health services which may become necessary as a result of development projects and the incorporation of these costs into the projects' budgets.

Advisory services in regional development programs, especially water pollution control programs, in the preparation of decision-making models for the management of water resources, and in planning for the improvement of the physical and social infrastructure of settlements will continue to be provided to the countries.

	1977	1978	1979
FUNDS BUDGETED	\$ 68,490	\$ 73,125	\$ 81,660
PER CENT OF TOTAL	.1	.1	.1
PERSONNEL MONTHS	24	24	24
CONSULTANT MONTHS	4	4	5

--- PROJECTS ---

AMRO-2940

AMRO-2970

3000 - OCCUPATIONAL HEALTH

Occupational health is a basic requirement for socioeconomic progress in developing countries. First, it deals with the health of the adult productive population, estimated at 100 million for the Region, which is the prime mover in society. Second, it cares for the health of especially vulnerable groups who are exposed simultaneously to general ill-health and to additional hazardous conditions at work. Decision makers and/or employers must have information on the nature and magnitude of occupational hazards and their effects and be aware that occupational health programs are essentially preventive, that they are not, as such, limited to treatment of illness or the investigation of accidents after they occur.

During the present decade, PAHO/WHO has provided consultation to 16 countries in the solution of specific problems and in the organization and development of programs in this field. Collaboration has also been given through periodic evaluation of those activities in progress within the occupational health programs. The Organization, through CEPIS, has contributed to the planning and presentation of short courses and supplied technical assistance and information to Member Countries. Progress has been made not only in the number of programs but also in the services rendered in the Region. The past emphasis on compensation and other social security benefits, rather than on prevention, is gradually changing, for the benefit of the workers.

PAHO/WHO will cooperate in establishing or developing local, national or regional agencies that have adequate infrastructure to carry out occupational health programs, with well-defined lines of organization, jurisdictional limits and responsibilities. Technical assistance will be supplied to establish and improve programs for the evaluation, prevention and control of risks to health and safety in the work environment, promoting more active labor and management participation in the field. Support will also be given to developing human resources through regular and intensive educational programs and fellowships, adequate to undertake plans and achieve the goals adopted for the Region.

CEPIS will collaborate with the Member Countries along the above-mentioned lines of cooperation and supply the technical information required by those countries where field programs are in progress.

	1977	1978	1979
FUNDS BUDGETED	\$ 75,400	\$ 23,700	\$ 27,050
PER CENT OF TOTAL	.1	-	-
PERSONNEL MONTHS	29	24	24
CONSULTANT MONTHS	1	1	1
FELLOWSHIP MONTHS	26	20	20
SEMINARS AND COURSES	\$ 1,300	\$ -	\$ 2,250
SUPPLIES AND EQUIPMENT	\$ 27,100	\$ 3,000	\$ 1,000
OTHER	\$ 1,150	\$ -	\$ -

--- PROJECTS ---

AMRO-2070
BOLIVIA-3000PERU-3000
URUGUAY-3000

VENEZUELA-3000

Animal Health and Veterinary Public Health

3100 - PROGRAM PLANNING AND GENERAL ACTIVITIES

In this age of extensive population growth and great technical development, the countries of the Americas are confronting innumerable problems which need appropriate solutions. Among these problems, which are one of the principal concerns of the Ministers of Health and Agriculture, is, on the one hand, the urgent need to increase the availability of animal proteins, especially meat and milk, in order to meet the growing needs of the population; on the other hand is the need to reduce the prevalence of livestock diseases which are largely responsible for these deficiencies in the production of animal proteins.

Prevention, control and eradication of livestock diseases require the existence of a complete infrastructure capable of adequately detecting the presence of diseases and organizing and implementing control and eradication measures for these diseases. The infrastructure must also be capable of preventing the introduction of diseases into a country where they do not exist.

The efficiency of the animal health and veterinary public health services infrastructure will, to a large extent, depend on the quality and quantity of human resources available for implementing these services.

PAHO/WHO has been developing technical assistance programs for the Ministries of Health and Agriculture which include assistance in the preparation of animal health projects, training courses for technical personnel, training in techniques at PAHO/WHO centers, and advisory services provided by assigning PAHO/WHO technicians and consultants to the Member Countries on a short-term basis. These activities are intended to improve national human resources involved in programs for the prevention and control of animal diseases and zoonoses.

	1977	1978	1979
FUNDS BUDGETED	\$ 2,697,622	\$ 1,342,727	\$ 1,346,184
PER CENT OF TOTAL	3.8	2.1	2.1
PERSONNEL MONTHS	533	361	312
CONSULTANT MONTHS	89	15	18
FELLOWSHIP MONTHS	481	145	141
SEMINARS AND COURSES	\$ 85,411	\$ 25,000	\$ 20,000
SUPPLIES AND EQUIPMENT	\$ 299,596	\$ 28,729	\$ 25,628
GRANTS	\$ 2,000	\$ 2,500	\$ 2,750
OTHER	\$ 104,427	\$ 8,527	\$ 7,849

---- PROJECTS ----

AMRO-3110	BRAZIL-3101	JAMAICA-3100
AMRO-3120	BRAZIL-3102	NICARAGUA-3101
AMRO-3130	COLOMBIA-3100	PANAMA-3100
AMRO-3131	DOMINICAN REPUBLIC-3100	PARAGUAY-3100
AMRO-3140	ECUADOR-3101	SURINAM-3100
AMRO-3100	GUYANA-3100	TRINIDAD AND TOBAGO-3100
AMRO-3171	GUYANA-3101	VENEZUELA-3100
AMRO-3180	HAITI-3100	WEST INDIES-3101
BRAZIL-3100	HONDURAS-3100	

3200 - FOOT-AND-MOUTH DISEASE

Most of the population of Latin America rarely consumes the minimum level of animal proteins. The main diet consists of vegetable proteins and carbohydrates, resulting in a state of malnutrition which makes it easier for the population to be afflicted with diseases.

Among the leading causes of protein deficiency in South America are livestock diseases, of which foot-and-mouth disease is the principal problem. This disease is responsible for estimated annual losses in South America of more than US\$400 million.

In Latin America, where there is an unfavorable trade balance, foot-and-mouth disease makes it even more difficult to achieve a balance of trade because countries free from this disease avoid trade in animals and animal by-products with affected countries.

Foot-and-mouth disease is not only a problem in inter-American relations, but also affects public health due to the loss in domestic markets of animal proteins for public consumption.

The continually increasing flow of travelers, products and animals in the modern world provides new opportunities for the rapid spread of diseases to new areas. The Caribbean, Central America and North America are free of foot-and-mouth disease; therefore, all possible measures should be taken to prevent the spread of this disease to these countries.

PAHO/WHO, through PANAFITSA, has been working for slightly more than 25 years in activities related to the control and eradication of this disease in South America and preventing its introduction into the rest of the countries of the Hemisphere. The Center's activities include not only research programs on the different aspects of foot-and-mouth disease, but also direct action in technical training and education of personnel from the Member Countries and the evaluation of the programs carried out in these countries.

	1977	1978	1979
FUNDS BUDGETED	\$ 3,208,295	\$ 2,966,083	\$ 3,057,029
PER CENT OF TOTAL	4.6	4.8	4.8
PERSONNEL MONTHS	2037	2016	2028
CONSULTANT MONTHS	75	38	21
FELLOWSHIP MONTHS	255	105	81
SEMINARS AND COURSES	\$ 53,594	\$ 34,000	\$ 50,000
SUPPLIES AND EQUIPMENT	\$ 455,717	\$ 383,766	\$ 367,245
OTHER	\$ 271,794	\$ 147,568	\$ 143,444

---- PROJECTS ----

AMRO-3230	CHILE-3200	PERU-3200
AMRO-3200	COLOMBIA-3200	VENEZUELA-3200
ARGENTINA-3200	ECUADOR-3200	
BOLIVIA-3200	PANAMA-3200	
BRAZIL-3201	PARAGUAY-3200	

3300 - ZONOSSES

Some of the most frequently occurring human diseases are acquired directly from animals. For this reason, the control of zoonoses plays a very important role in human health. In the countries of the Region, animal diseases are a serious obstacle to adequate development of livestock raising, which is essential for increasing the animal protein needed to feed the Latin American population.

It is imperative to establish national animal health programs for the support of livestock development plans in which Latin American countries are involved.

Many of the problems of public health arise from diseases which affect human and animal health.

Diseases such as rabies constitute serious problems for public health in the Americas. The canine species is the main reservoir and vector of the disease. Migration to the cities of people from rural areas, with their many dogs, is increasing the incidence of the disease. Among wild animals, bats are the principal vectors and reservoirs of the disease, especially rabies in cattle.

Brucellosis is one of the most important zoonoses in Latin America because of its high incidence, the infection it produces and resulting economic losses. The disease exists in all countries and more than 8,000 human cases have been reported. The economic impact of brucellosis on livestock production is very great.

Among animal tuberculosis, bovine tuberculosis is the most serious because of the economic losses it causes in livestock herds. It is also a source of infection to man and animals.

Equine encephalitides diseases with high morbidity and mortality rates, are a constant threat to the health and economy of the Latin American countries.

Hydatidosis and other parasitic animal diseases which can be transmitted to man continue to be serious economic and health problems for these countries. Sheep breeding in open pastures in Argentina, Brazil, Chile and Peru contributes to the high incidence of hydatidosis in these countries.

Leptospirosis is another widespread zoonosis in the Hemisphere. A mortality rate of up to 40% has been observed in hospitalized cases.

PAHO/WHO, through CEPANZO, provides assistance and advisory services to the Member Countries for the control and prevention of zoonoses and other animal diseases. The Center helps the countries to improve the infrastructure necessary for adequate operation of their animal health services and programs. A noteworthy activity of CEPANZO is the coordination of epidemiological surveillance of the countries' health services so as to be able to efficiently utilize the reporting of zoonotic diseases (rabies, tuberculosis, equine encephalitides, etc.).

	1977	1978	1979
FUNDS BUDGETED	\$ 1,994,840	\$ 2,134,007	\$ 2,868,609
PER CENT CF TOTAL	2.8	3.4	4.5
PERSONNEL MONTHS	1331	1308	1308
CONSULTANT MONTHS	8	25	43
FELLOWSHIP MONTHS	139	131	135
SEMINARS AND COURSES	\$ 13,375	\$ 16,805	\$ 83,255
SUPPLIES AND EQUIPMENT	\$ 89,822	\$ 158,456	\$ 584,159
OTHER	\$ 182,314	\$ 149,846	\$ 126,497
---- PROJECTS ----			
AMRO-3300	CUBA-3300	PERU-3302	
AMRO-3370	JAMAICA-3300	VENEZUELA-3300	
BARBADOS-3300	MEXICO-3300	VENEZUELA-3301	
BOLIVIA-3300	MEXICO-3301		
BRAZIL-3350	PERU-3300		
COLOMBIA-3301	PERU-3301		

3500 - QUALITY CONTROL OF FOODSTUFFS

The risks to the health of the populations of the Member Countries from food-borne toxic-infections have increased and intensified in recent years as a consequence of centralization of food production and expansion of international commerce and tourism. Many outbreaks of food-borne diseases are not documented and, of those that are reported, the causative agent is seldom defined.

Concurrent with the health risks is the continued excessive wastage of foodstuffs due to contamination by biological, chemical, and physical agents, resulting from improper transportation, refrigeration, storage, and handling. Contamination of food of animal origin is considered more serious than that of other foods because the same pathologic processes occur in man and animals. Meat and meat products are inspected only in the large packing houses, and in many instances serious deficiencies exist, except in that destined for export. Unwholesome food from animals also has an incalculable adverse financial effect, particularly for those countries that depend on funds from food exports for their balance of payments.

The technical program in this area gives particular attention to the development of national food safety programs, including sanitary aspects and the prevention of food-borne toxic-infections. Special emphasis is given to the standardization of sampling methods and analysis by the strengthening of analytic laboratories and the training of laboratory analysts and food inspectors.

The Food Hygiene Training Center in Venezuela provides instruction in inspection and control techniques. The Unified Food Control Laboratory in Guatemala serves to strengthen food control activities, particularly the physical and microbiological examination of food, and to train laboratory technicians.

	1977	1978	1979
FUNDS BUDGETED	\$ 441,380	\$ 296,380	\$ 315,820
PER CENT OF TOTAL	.6	.5	.5
PERSONNEL MONTHS	84	72	72
CONSULTANT MONTHS	6	6	6
FELLOWSHIP MONTHS	6		6
SEMINARS AND COURSES	\$ -	\$ 4,000	\$ -
SUPPLIES AND EQUIPMENT	\$ 39,000	\$ 8,000	\$ 8,000
GRANTS	\$ 6,000	\$ 6,000	\$ 6,000
OTHER	\$ 106,500	\$ 24,850	\$ 25,355

---- PROJECTS ----

AMRO-3500
AMRO-3571

GUATEMALA-3500
VENEZUELA-3500

3600 - QUALITY CONTROL OF DRUGS

There is increasing awareness in Latin America and the Caribbean area that consumption and expenditures for drugs, while increasing significantly, have not corresponded to the health requirements of large segments of the population. To remedy this situation, comprehensive national drug policies must be developed and implemented to make available throughout the countries, at reasonable prices, drugs adapted to actual health needs. In developing countries, a significant step in this direction is the elaboration of a limited list of essential drugs, their distribution, and the dissemination of unbiased information on their use. All national drug policies must provide for the financial and human resources for the government control of drugs in order to assure the quality, safety, and efficacy of marketed drugs, whether imported or produced locally, and to monitor their use.

The activities and programs under this program are, therefore, directed toward improving the capability in these areas of the responsible government health services. The assistance offered to Member Governments includes expert advice on the organization and operation of drug control agencies and assistance in developing modern drug legislation and effective regulations. Training for analysts, inspectors, and administrative officials is provided to assure that good practices in the manufacture and quality control of drugs are followed by the producer and that the government registration and postmarketing surveillance are adequate. PAHO/WHO distributes information on the use of drugs and on developments affecting their safety and efficacy. This information assists governments in revising and updating the list of accepted drugs.

The PAHO/WHO-assisted project for a national drug quality institute in Brazil will establish a site for training and research in this field, and will be an important factor in improving the manufacturing practices and quality control of drugs in both official and private sectors.

In addition to the individual governments, guidance and assistance are being provided to groups of governments such as the Andean Group, operating under the terms of the Hipólito Unzué Agreement, and the Caribbean countries operating under an agreement to establish a regional drug testing laboratory in Jamaica.

	1977	1978	1979
FUNDS BUDGETED	\$ 122,900	\$ 500,960	\$ 532,600
PER CENT OF TOTAL	.2	.8	.8
PERSONNEL MONTHS	36	84	84
CONSULTANT MONTHS	3	5	8
FELLOWSHIP MONTHS		3	17
SUPPLIES AND EQUIPMENT	\$ -	\$ 86,800	\$ 58,200
GRANTS	\$ 12,000	\$ 8,000	\$ 4,000
OTHER	\$ -	\$ 27,810	\$ 31,770

---- PROJECTS ----

AMRO-3600
BRAZIL-3600

JAMAICA-3600

3700 - PREVENTION OF ACCIDENTS

In the Region of the Americas, traffic accidents rank first or second as a cause of death among persons in the age group 14-25 years. This general statement does not have a proper statistical basis, since both the nomenclature and the statistical systems are at present not comparable or incomplete.

In its role as advisor to the countries on reducing the incidence of traffic accidents and the disabilities, deaths and financial losses they entail, the Organization will emphasize the standardization of statistical systems on which practical epidemiological investigations can be based. These investigations will also serve as a basis for future national and regional plans and programs for the prevention of traffic accidents. In this way, the best possible use will be made of the scarce resources available to this project.

	1977	1978	1979
FUNDS BUDGETED	\$ 35,030	\$ 30,465	\$ 20,480
PER CENT OF TOTAL	-	-	*
CONSULTANT MONTHS	2	2	2
FELLOWSHIP MONTHS	9	9	9
SEMINARS AND COURSES	\$ 18,000	\$ 13,500	\$ 4,500
SUPPLIES AND EQUIPMENT	\$ 4,700	\$ 3,000	-
---- PROJECTS ----			
AMRO-3700	ARGENTINA-3700		

Complementary Services

4100 - NURSING

The action taken by governments to extend health services to provide primary health care to the underserved population must be based on a recognition that existing resources must be used more efficiently and effectively. Auxiliary personnel are the front-line workers whose actions should interface with those of the community in the identification of needs, establishment of priorities, and in meeting those needs.

The role of all nursing personnel must be redefined so that all are primary care providers and in addition that the nurse is also able to train the auxiliaries, the community workers, and through use of epidemiologic methods to identify needs of the community and reorient the use of resources.

The changes in the health care delivery system make essential the introduction of change in the organization and management of services. Standards that ensure the provision of safe and effective care must be implanted into the services, and pertinent manuals be available for use, particularly by the primary care providers.

The increased demand for hospital services makes it mandatory that first-line hospitals be strengthened and improved in order to meet the demand for and provide effective care.

All this requires that governments develop their nursing systems to respond to the existing and emerging health needs.

The objectives of the PAHO/WHO technical cooperation program in nursing services are: to define, develop and strengthen the nursing personnel input in the delivery of primary health care and its extension to the underserved population; to strengthen nursing services in baseline hospitals, including the implantation of nursing care standards, so that the resources are used more effectively and efficiently; to define and develop a system of nursing services in each country capable of providing the input needed for the extension of health service coverage.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,300,619	\$ 1,378,690	\$ 1,527,760
PER CENT OF TOTAL	1.8	2.2	2.4
PERSONNEL MONTHS	420	408	420
CONSULTANT MONTHS	15	15	14
FELLOWSHIP MONTHS	78	75	96
SEMINARS AND COURSES	\$ 54,500	\$ 57,000	\$ 66,200
SUPPLIES AND EQUIPMENT	\$ 13,950	\$ 12,600	\$ 12,650
---- PROJECTS ----			

AMRO-4110
AMRO-4120
AMRO-4130
AMRO-4140
AMRO-4160
AMRO-4100
AMRO-4170
AMRO-4171
AMRO-4180
ARGENTINA-4100
BAHAMAS-4100

BOLIVIA-4100
BRAZIL-4100
BRAZIL-5160
CHILE-4100
DOMINICAN REPUBLIC-4100
DOMINICAN REPUBLIC-5100
ECUADOR-4100
ECUADOR-5100
GUYANA-4100
HAITI-4100
HAITI-5100

MEXICO-5102
NICARAGUA-4100
PARAGUAY-4100
PERU-5102
PERU-5103
SURINAM-4100
URUGUAY-4100
WEST INDIES-4100

4200 - LABORATORIES

Governments within the Region are becoming increasingly aware of the importance of the laboratory in all phases of public health and medical care. Laboratory services, however, have still not been brought up to a satisfactory level. The Ten-Year Health Plan for the Americas clearly ascribes to PAHO/WHO the role of developing programs which will lead to the modernization and expansion of all health laboratory services in the countries of Latin America and the Caribbean.

To meet these objectives programs within and between countries have been directed to the establishment of central network laboratory systems. Guidelines and goals have been established for the central laboratories so that they would be in a position to control all diagnostic reagents used in the country and develop a capability for their production; provide and where necessary develop and improve standardized test procedures for satellite laboratories; initiate and conduct performance evaluation studies; establish and conduct training courses for all levels of personnel; and assist in special programs in medical care and epidemiological surveillance studies.

To help achieve these goals PAHO/WHO provides advisory assistance in all phases of laboratory programs and, within budgetary limitations, provides funds for special purchases of equipment, supplies, fellowships, and consultants. It also arranges for difficult to obtain reagents and provides laboratory manuals for all phases of laboratory work.

Concerning blood banking, PAHO/WHO's responsibility stems from the Ten-Year Health Plan for the Americas and additionally from specific PAHO and WHO resolutions passed in 1976. These resolutions require PAHO/WHO to promote in Member Countries national blood policies based on voluntary donation/nonprofit systems. The approach has been to provide direct advisory assistance with a view towards developing self-sufficiency for blood and all of its components. To assist in this, the Organization is encouraging the use of component therapy. Under this system the surplus plasma can be used for the production of plasma fractions as well as the collection of sufficient blood grouping and typing sera to meet a country's needs.

	1977	1978	1979
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FUNDS BUDGETED	\$ 338,342	\$ 263,775	\$ 287,070
PER CENT OF TOTAL	.5	.4	.4
PERSONNEL MONTHS	36	36	36
CONSULTANT MONTHS	38	21	21
FELLOWSHIP MONTHS	94	27	30
SEMINARS AND COURSES	\$ 7,000	\$ 7,230	\$ 4,750
SUPPLIES AND EQUIPMENT	\$ 18,800	\$ 19,435	\$ 21,960
GRANTS	\$ 3,000	\$ 3,000	\$ 3,000

---- PROJECTS ----

AMRO-4240	BOLIVIA-4200	PERU-4200
AMRO-4200	BRAZIL-4200	PERU-4201
AMRO-4280	COLOMBIA-4200	VENEZUELA-4200
ARGENTINA-4200	FRENCH ANTILLES-4200	

4300 - EPIDEMIOLOGICAL SURVEILLANCE

The purpose of this project is to promote the application of epidemiologic principles to general public health programs and to develop a coordinated international surveillance system for human and animal diseases in the Americas. Within the countries, assistance will be aimed at the integration of surveillance activities into the regular work of primary health services. Because of the scarcity of well-trained epidemiologists, training will also be given high priority. Activities will include strengthening the curriculum of the Regional Course on Epidemiology in Caracas, international seminars on recent developments in epidemiology, inservice training of PAHO/WHO epidemiologists, and collaborative Spanish-language training programs.

The project also develops and disseminates norms and standards for surveillance, analyzes and evaluates surveillance information gathered on a regional basis, responds to requests for epidemic assistance from Member Countries, and provides "feedback" in the form of surveillance and disease control information throughout the Region.

	1977	1978	1979
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FUNDS BUDGETED	\$ 2,490,915	\$ 2,011,795	\$ 2,033,930
PER CENT OF TOTAL	3.5	3.2	3.2
PERSONNEL MONTHS	1032	1104	1104
CONSULTANT MONTHS	14	22	26
FELLOWSHIP MONTHS	74	95	91
SEMINARS AND COURSES	\$ 75,110	\$ 43,000	\$ 41,200
SUPPLIES AND EQUIPMENT	\$ 253,249	\$ 67,960	\$ 29,055
GRANTS	\$ 29,727	\$ 28,000	\$ 24,000
OTHR	\$ 635,660	\$ 158,140	\$ 72,830

---- PROJECTS ----

AMRO-4330	BRAZIL-4311	HONDURAS-4300
AMRO-4331	BRAZIL-4312	JAMAICA-4300
AMRO-4340	COLOMBIA-4300	NICARAGUA-4300
AMRO-4360	COSTA RICA-4300	PANAMA-4300
AMRO-4300	DOMINICAN REPUBLIC-4300	TRINIDAD AND TOBAGO-4300
AMRO-4370	EL SALVADOR-4300	UNITED STATES OF AMERICA-5101
	GUAYANA-4301	

4400 - HEALTH EDUCATION

Health is a right of every human being and it is also one of its primary responsibilities. In order that the health programs achieve their goals it is fundamental to count with the participation of the individuals, families and communities. This is, indeed, a valuable factor which should be promoted through education, i.e., the global process that makes it possible for the individuals and groups to interpret, adapt and contribute to enrich their environment through the maximum utilization of their capabilities.

The objective of the projects under this series, in accordance with the Ten-Year Health Plan for the Americas, and Resolutions WHA 27.27, WHA 27.28 and CD 22.23, is to guarantee the formal and continuous participation of the individuals, families and communities in the activities programmed for their health benefit; as well as to reduce the resistance to the process of change, its concepts, habits and health behaviour by way of a diagnostic and adequate education.

Efforts to stimulate and take advantage of the collaboration provided by institutions and population groups will be doubled, in order that they know better their reality, learn to relate their health improvement with social and economic progress of other groups within their nation's context, assume responsibilities as guiding elements for development and that a motivation will be generated in them to contribute to solve their health problems. Collaboration will be provided to the governments in program reorientation and specialty services, the development of new techniques on community promotion, training of health and allied personnel including the area of general education, and the investigations in priority areas, concentrating efforts in the fields of maternal and child health, nutrition, control of communicable diseases and environmental sanitation.

	1977	1978	1979
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FUNDS BUDGETED	\$ 137,855	\$ 139,945	\$ 150,125
PER CENT OF TOTAL	.2	.2	.2
PERSONNEL MONTHS	38	36	36
CONSULTANT MONTHS	3	3	3
FELLOWSHIP MONTHS	12	12	12
SUPPLIES AND EQUIPMENT	\$ 3,500	\$ 5,000	\$ 5,000

---- PROJECTS ----

AMRO-4410
BRAZIL-4400

MEXICO-4400

4500 - REHABILITATION

It is increasingly recognized by health authorities that, unless services of disability prevention and rehabilitation are made available under public health programs, much of the care provided for injury and disease will be wasted, as the unrehabilitated patient will continue to be a liability to his community and a drain on its scarce socioeconomic resources. This is particularly important in the field of physical therapy, where early services can prevent disability and promote independence. The training of doctors and other rehabilitation personnel is an important component of this program, but it is equally important to ensure that the services of such staff are directly or indirectly available to as many of the potentially disabled as possible.

The purpose of this program is to ensure that appropriate measures are taken so that the physical or mental impairment caused by disease or trauma may be prevented from developing into a disability or, if this is not possible, that the disabled may have access to services which will enable them to become physically, socially and economically independent as early as possible.

Achievement of the above goal will be promoted by making services of medical rehabilitation available as part of public health programs. Where appropriate this can be achieved by services of physical medicine, physical and occupational therapy; services for speech, hearing and sight defects; prosthetic and orthotic services; and services for psychological rehabilitation. In addition, increasing use of simplified services at the community level will be introduced in order that the use of more complex services can be restricted to those disabled persons for whom they are essential.

PAHO/WHO will continue to urge public health authorities to include rehabilitation services in their medical care programs. Assistance will be provided in the planning of such services and in the training of personnel to provide them. Cooperation has been received in this activity from UNDP, UNICEF, ILO and the World Rehabilitation Fund.

	1977	1978	1979
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FUNDS BUDGETED	\$ 328,643	\$ 274,140	\$ 273,040
PER CENT OF TOTAL	.5	.4	.4
PERSONNEL MONTHS	48	36	24
CONSULTANT MONTHS	15	17	20
FELLOWSHIP MONTHS	80	66	75
SEMINARS AND COURSES	\$ 5,000	\$ -	\$ -
SUPPLIES AND EQUIPMENT	\$ 17,700	\$ 15,000	\$ 15,000
OTHER	\$ 575	\$ -	\$ -

---- PROJECTS ----

AMRO-4500
ARGENTINA-4500
BRAZIL-4500

CHILE-4500
COLOMBIA-4500
JAMAICA-4500

MEXICO-4500
VENEZUELA-4500

II. DEVELOPMENT OF THE INFRASTRUCTURE

Health Systems

5000 - PROGRAM PLANNING AND GENERAL ACTIVITIES

PAHO/WHO offers the Member Governments technical cooperation in analyzing health problems and finding suitable solutions to them. However, there is need for a master program that channels and coordinates this cooperation and serves as a communication link between the Organization and the different institutions and levels of work in the countries. This program is the vehicle through which international cooperation gives overall support to the Governments in improving the system, including the quality of services and their extension to the unserved population.

The purpose of the program is to ensure that the Organization's technical cooperation for strengthening the national health service system is properly coordinated. For that purpose, the program responds to national development and health policies and strategies in the light of the regional policies decided upon by the Governing Bodies of the Organization. In addition, it is aimed at strengthening the efforts of the Governments in priority areas. It also supports the actions of national health institutions and of other sectors in formulating, executing and evaluating plans and programs that directly or indirectly help to raise the levels of health of the population to be served. It also seeks to strengthen national mechanisms for coordinating international health cooperation in order to avoid duplications, waste of resources and efforts, and loss of time in the accelerated development and extension of national health services.

	1977	1978	1979
FUNDS BUDGETED	\$ 2,670,494	\$ 2,975,430	\$ 3,233,007
PER CENT CF TCIAL	3.8	4.8	5.1
PERSONNEL MONTHS	1139	1187	1187
CONSULTANT MONTHS	13	12	11
FELLOWSHIP MONTHS	11	11	25
SEMINARS AND COURSES	\$ 10,000	\$ 12,000	\$ 10,000
SUPPLIES AND EQUIPMENT	\$ 200	\$ 200	\$ 200
GRANTS	\$ 10,100	\$ 10,100	\$ 10,100
OTHER	\$ 562,755	\$ 577,940	\$ 610,535

--- PROJECTS ---

AMRO-5030	CHILE-5000	HONDURAS-5000
AMRO-5002	COLOMBIA-5000	JAMAICA-5000
AMRO-5005	COSTA RICA-5000	NICARAGUA-5000
AMRO-5007	CUBA-5000	PANAMA-5000
AMRO-5010	HEADQUARTERS	PARAGUAY-5000
AREA OFFICES	DOMINICAN REPUBLIC-5000	PARAGUAY-5100
ARGENTINA-5000	ECUADOR-5000	PERU-5000
ARGENTINA-5100	ECUADOR-6500	SURINAM-5000
BARBADOS-5000	EL SALVADOR-5000	TRINIDAD AND TOBAGO-5000
BELIZE-5000	GUATEMALA-5000	URUGUAY-5000
BOLIVIA-5000	GUYANA-5000	VENEZUELA-5000
BRAZIL-5000	HAITI-5000	

5100 - GENERAL PUBLIC HEALTH SYSTEMS

In a number of Latin American countries, the health sector is not clearly defined. Its components normally operate without coordination. The institutions within the sector are scattered and uncoordinated, and there is an absence of systematic programming, all of which results in unnecessary duplication of certain types of services. The linkage between health institutions and institutions responsible for economic and social development is unsatisfactory, and there is a marked lack of community participation in the development and operation of the services.

The various primary care systems in operation in the countries of the Americas demonstrate the organizational, financial, technical and administrative weakness of the primary care levels of the formal systems. The operational inefficiency of the health systems is a major cause of the high cost and low productivity of the services. In addition, the situation is compounded by the lack of trained personnel, the poor use made of them, the lack of training programs, as well as the use of inappropriate methods for training and using human and financial resources. Mechanisms for the communication and transfer of technology between countries with different characteristics are defective, and there is a lack of knowledge of alternative technologies for identifying and solving problems.

The principal purpose of the program is to improve the organization, planning and administration of health service systems; to assist the countries of the Americas in providing the entire population with safe and effective care; and to promote community participation in all stages of the development of operational health services through direct cooperation with the countries that request it.

Activities under this program will be carried out in close collaboration with those of the other units of the Bureau and are directed towards the following basic aspects:

- i) to guide the processes of programming, execution and evaluation of health service systems for coverage extension;
- ii) to reorganize the training of national technicians so that they can define, guide and execute care-level plans in different types of systems and under different conditions of socioeconomic development, taking into account cultural, political and/or administrative constraints;
- iii) to make available to the countries of the Region the results of studies on informal subsystems for the purpose of guiding national efforts for the development in each country of its own national systems, based on effective coordination of informal and formal subsystems and active community participation;
- iv) to provide the countries with sets of methods, instruments and alternative technologies that can be adapted to the special conditions of each country and increase the efficiency and effectiveness of the organization and administration of health services;

- v) to provide the technical information material required;
- vi) to train a sufficient number of properly qualified professional, technical and auxiliary personnel;
- vii) to evaluate service delivery and administration of systems at all care levels with community participation.

	1977	1978	1979
FUNDS BUDGETED	\$ 4,541,032	\$ 3,289,608	\$ 3,646,153
PER CENT OF TOTAL	6.5	5.3	5.7
PERSONNEL MONTHS	646	600	624
CONSULTANT MONTHS	243	124	120
FELLOWSHIP MONTHS	1418	728	841
SEMINARS AND COURSES	\$ 147,105	\$ 129,000	\$ 109,975
SUPPLIES AND EQUIPMENT	\$ 423,435	\$ 200,006	\$ 163,495
GRANTS	\$ 46,000	\$ 32,000	\$ 33,000
OTHER	\$ 219,603	\$ 30,450	\$ 32,050

---- PROJECTS ----

AMRO-5100	EL SALVADOR-5100	PARAGUAY-5100
AMRO-5170	FRENCH ANTILLES-5100	PARAGUAY-5101
AMRO-5171	GRENADA-5100	PARAGUAY-5103
ARGENTINA-5100	GUATEMALA-5100	PERU-5100
BAHAMAS-5100	GUATEMALA-5101	PERU-5101
BARBADOS-5100	GUATEMALA-5102	PERU-5102
BELIZE-5100	GUATEMALA-5103	PERU-5103
BOLIVIA-5100	GUYANA-5100	PERU-5104
BOLIVIA-5103	HAITI-5100	SURINAM-5100
BRAZIL-5100	HONDURAS-5100	TRINIDAD AND TOBAGO-5100
BRAZIL-5160	HONDURAS-5102	URUGUAY-5100
CANADA-5101	JAMAICA-5100	UNITED STATES OF AMERICA-5100
CHILE-5100	MEXICO-5100	UNITED STATES OF AMERICA-5101
COSTA RICA-5100	MEXICO-5101	UNITED STATES OF AMERICA-5102
CUBA-5100	MEXICO-5102	VENEZUELA-5100
DOMINICAN REPUBLIC-5100	NETHERLANDS ANTILLES-5100	WEST INDIES-5100
ECUADOR-5100	NICARAGUA-5100	WEST INDIES-5101
ECUADOR-5101	NICARAGUA-5102	
ECUADOR-5102	PANAMA-5100	

5200, MEDICAL CARE SYSTEMS

The purpose of this project is to assist the governments in: 1) extending the benefits of medical care to the highest-risk population which at present has no access to health services; 2) increasing the supply of government, social security and private services; and 3) developing human, physical and technological resources for satisfying the need for medical care deriving from the increase in population.

Accordingly, coordinated technical cooperation activities are being provided in four major fields: 1) health care and medical care administration; 2) administration of health institutions (hospitals, clinics, maternity hospitals, etc.); 3) design and architecture of health establishments; and 4) maintenance of health establishments and biomedical engineering.

Technical cooperation activities are directed towards the following problem areas in each of the four above-mentioned fields: health care and medical care administration: care levels, primary care, regionalization, sectoral coordination, outpatient care, emergency care, progressive patient care, diagnostic services, clinical information and technology; administration of health institutions: institutional studies, administrative information, human resources, supplies, financing, production and support services, personnel training, executive training, organizational development, directives, inventories, comparative studies, operation of institutions and programs for the training of technical and professional administrators; design and architecture of health establishments: functional design, architectural design, equipment, assessment of installed capacity, feasibility studies and capital investment planning; maintenance of health establishments and biomedical engineering: design of facilities, assessment of equipment, maintenance systems, training of auxiliary, technical and professional personnel, maintenance centers, catalogues, manuals, references, safety and accident prevention.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,478,615	\$ 905,775	\$ 892,250
PER CENT OF TOTAL	2.1	1.4	1.4
PERSONNEL MONTHS	240	220	204
CONSULTANT MONTHS	63	13	15
FELLOWSHIP MONTHS	500	141	124
SEMINARS AND COURSES	\$ 145,217	\$ 17,000	\$ 16,000
SUPPLIES AND EQUIPMENT	\$ 31,475	\$ 41,100	\$ 43,815
GRANTS	\$ 20,000	\$ 20,000	\$ 10,000
OTHER	\$ 65,696	\$ -	\$ -

---- PROJECTS ----

AMRO-5210
AMRO-5220
AMRO-5230
AMRO-5200
AMRO-5201
AMRO-5275
ARGENTINA-5200
ARGENTINA-5201
BAHAMAS-5200
BOLIVIA-5200
BRAZIL-5100

COLOMBIA-5200
COSTA RICA-5202
CUBA-5200
CUBA-5201
HEADQUARTERS
ECUADOR-5200
ECUADOR-5201
EL SALVADOR-5100
EL SALVADOR-5200
GUATEMALA-5200
HONDURAS-5200

HONDURAS-5201
JAMAICA-5200
PERU-5200
URUGUAY-5200
VENEZUELA-5200
WEST INDIES-5200
WEST INDIES-5201
WEST INDIES-5203

5300 - PLANNING

The countries of Latin America and the Caribbean recognize that national health planning processes are the best way of improving the structure and increasing the efficiency and effectiveness of the operation of national health systems. The deficiencies identified in most of the countries are as follows: lack of a definition of health policies and strategies; lack of coordination of sectoral policies and its general policy for the extension of health services in each country; lack of adaptation and identification of inconsistencies with political, economic, cultural, social and technological conditions in each country; low production and high cost of services; lack of knowledge of and open resistance to methods that will facilitate prompt and efficient adjustment of decisions; and absence of information, evaluation, control and decision-making systems.

The principal purpose of this program is to help develop national planning processes through direct cooperation to the countries that request it and technical support to regional and subregional activities falling within the ambit of the program.

This program will be conducted in close coordination with the other units of the Bureau and will be aimed at the following basic aspects: formulation of a national policy and strategy and definition of sectoral health service systems; support for health planning processes as a continuing and routine activity in the countries; establishment of methodological and operational guidelines for planning and evaluation; encouragement and support for the education and training of personnel in health planning and related aspects; encouragement and support of health research; encouragement and collaboration with a view to establishing national information systems linked to the national planning system; and development and improvement of systems for the programming of joint country/PAHO/WHO activities.

	1977	1978	1979
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FUNDS BUDGETED	\$ 765,226	\$ 734,747	\$ 707,305
PER CENT OF TOTAL	1.1	1.2	1.1
PERSONNEL MONTHS	159	176	168
CONSULTANT MONTHS	29	24	9
FELLOWSHIP MONTHS	33	33	36
SEMINARS AND COURSES	\$ 36,934	\$ 6,715	\$ 5,000
SUPPLIES AND EQUIPMENT	\$ 21,145	\$ 25,770	\$ 24,195
OTHER	\$ 23,120	\$ 10,000	\$ -

---- PROJECTS ----

AMRO-5310
AMRO-5320
AMRO-5330
AMRO-5360
AMRO-5300

AMRO-5302
ARGENTINA-5300
CANADA-5300
COLOMBIA-5300
COSTA RICA-5300

CUBA-5300
ECUADOR-5100
ECUADOR-5101
UNITED STATES OF AMERICA-5300

5400 - STATISTICS AND INFORMATION SYSTEMS

The program objective is to cooperate with Member Governments in the development of national health statistics systems and in the design and implementation of national information systems for the health sector. The latter must be compatible with the information systems for economic and social development and the specific needs of the country planning processes.

Planning, managing and evaluating health services, require current health data of good quality. Statistical systems must be improved to satisfy the requirements of information systems which support the decision and management processes. At all levels - local, national and international - the needs exist for data for these purposes.

In many countries of the Region health statistics covering natality, mortality, morbidity and the availability and utilization of health resources are incomplete, unreliable, underused and not current. Efforts must be increased to improve the sub-systems for the production of these data at all stages from collection through utilization.

A basic component of the statistical system for the delivery of health care is the medical record and its management. Efficient and well-organized medical record departments are not only essential to ensuring quality medical care but also are part of the structure of health statistics and health information systems. Methods must be developed to define the minimum data required at the various administrative levels. This task is particularly urgent for rural areas where resources are extremely limited.

Both records and statistical systems are dependent on adequately trained personnel. Emphasis is being placed on preparation of personnel resources, at professional, intermediate and auxiliary levels. Academic courses are required in the Region as well as programs of continuing education and inservice training. In most countries a need exists for a career structure for statistical personnel and for adequate supervision and remuneration in order to retain and benefit from investments in their training.

Through country and intercountry projects the Organization's statisticians and medical record consultants cooperate with the Member Governments in improving health statistical systems, in developing national health information systems and in developing related training activities.

The World Health Organization has the responsibility for producing at ten year intervals the Revisions of the International Classification of Diseases. The Regional Office for the Americas and the Latin American Center for Classification of Diseases in Caracas participate actively in this process coordinating the proposals of the Region for change. Here too, the Spanish versions are prepared of the two volumes and of supplementary classifications. It is expected that the Ninth Revision will be ready by the end of 1977, and that, following training courses and seminars in 1978, will be put into use in 1979.

In May 1976 the World Health Assembly approved a Resolution creating in São Paulo a Center for Classification of Diseases in Portuguese. Work was immediately initiated on preparation of the two Ninth Revision volumes and on evaluating the use of the Classification in several state capitals in Brazil. Courses and teaching material are regularly provided by both Centers to the countries of the Region.

Collaborative research on mortality continues to be a part of the program in health statistics. Analysis of data collected for the Inter American Investigation of Mortality in Childhood is on-going as is operational research on Medical Records and minimum basic data sets. A Regional Advisory Committee on Health Statistics meets at approximately two year intervals, providing guidelines for the Organization's activities in this program area. At its most recent meeting the recommendation was made that additional Regional collaborative research projects on morbidity and mortality be developed and that the statistics program participate actively in research of other program areas in which a statistical component exists.

As a Regional activity the Central Office in Washington collects from the Member Governments data on mortality, morbidity, immunizations, health resources and their utilization, including both hospitals and ambulatory care institutions, and on health manpower. Publications based on the analysis of these data include the Weekly Epidemiological Report, Health Conditions in the Americas, Reported Cases of Notifiable Diseases in the Americas, and Facts on Health Progress.

Data are also provided on request to individual or institutional users of international statistics. Support is also provided to other programs of the Organization on collection, processing and analysis of statistical data and studies.

	1977	1978	1979
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FUNDS BUDGETED	\$ 2,286,061	\$ 2,406,685	\$ 2,532,360
PER CENT OF TOTAL	3.2	3.8	4.0
PERSONNEL MONTHS	750	744	744
CONSULTANT MONTHS	23	19	20
FELLOWSHIP MONTHS	80	79	77
SEMINARS AND COURSES	\$ 84,000	\$ 111,500	\$ 87,740
SUPPLIES AND EQUIPMENT	\$ 101,829	\$ 44,250	\$ 17,550
GRANTS	\$ 7,000	\$ 7,000	\$ 7,000
OTHER	\$ 199,237	\$ 225,000	\$ 252,000
---- PROJECTS ----			
AMRO-5410	AMRO-5470	COSTA RICA-5401	
AMRO-5420	AMRO-5474	ECUADOR-5101	
AMRO-5430	AMRO-5480	JAMAICA-5401	
AMRO-5460	AMRO-5482	PARAGUAY-5400	
AMRO-5400	ARGENTINA-5400	PERU-5400	
AMRO-5401	BOLIVIA-5400	PERU-5402	
AMRO-5402	BRAZIL-5400	TRINIDAD AND TOBAGO-5400	
AMRO-5403	BRAZIL-5402	WEST INDIES-5400	
AMRO-5405	COLOMBIA-5401		

5500 - MANAGEMENT SYSTEMS

The administrative systems within the public health subsector have not developed consistently with the requirements of expanding changing social services. Lack of managerial skills among health service executives and administrators work in favor of preserving traditional practices that at present are insufficient to meet the challenge of articulating increasing demands, costs and critical scarcity of resources. There is an outstanding need for instituting changes in the administrative system along the lines of modern management concepts and techniques. This need becomes critical when it is necessary to adapt structures, methods and procedures to the policies for extension of coverage.

The content of the advisory program in administration is determined mainly by the recommendations of the III Special Meeting of Ministers of Health of the Americas, which recognized the shortcomings in organization and administration of national and local institutions as one of the major obstacles to making the means of prevention and treatment of diseases available to individuals. This recognition reaffirmed the activities that PAHO/WHO has been carrying on for more than 16 years through its programs of assistance to the Member Governments in improving their administrative structures and processes.

Through this program, the Organization provides support and coordination of activities as well as assistance to the Governments of the Region in overcoming these deficiencies, in order to obtain an overall improvement of administration in the health sector of the countries. The program also carries out promotional activities in the field of planning, organization and administrative management of health services by means of seminars for high-level officials, and cooperates in administrative diagnosis and analysis, in the framework of regional administrative reform and in the operational improvement of the systems and procedures in specific areas of administrative support services to institutions of the sector. Training courses for intermediate staff leading to practical administrative reform are provided.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,422,471	\$ 1,057,835	\$ 1,080,625
PER CENT OF TOTAL	2.0	1.7	1.7
PERSONNEL MONTHS	288	288	264
CONSULTANT MONTHS	112	17	12
FELLOWSHIP MONTHS	139	69	92
SEMINARS AND COURSES	\$ 16,150	\$ 21,400	\$ 32,200
SUPPLIES AND EQUIPMENT	\$ 11,830	\$ 9,735	\$ 7,700
OTHER	\$ 84,821	\$ -	\$ -

---- PROJECTS ----

AMRO-5510	COSTA RICA-5500	HONDURAS-5501
AMRO-5530	DOMINICAN REPUBLIC-5100	JAMAICA-5500
AMRO-5560	DOMINICAN REPUBLIC-5500	PARAGUAY-5500
AMRO-5500	EL SALVADOR-5100	PERU-5500
ARGENTINA-5500	EL SALVADOR-5500	TRINIDAD AND TOBAGO-5500
BAHAMAS-5500	GUATEMALA-5100	URUGUAY-5500
BOLIVIA-5500	GUYANA-5500	VENEZUELA-5500
BRAZIL-5100	HAITI-5100	WEST INDIES-5500
COLOMBIA-5500	HAITI-5500	
COSTA RICA-5100	HONDURAS-5500	

Development of Human Resources

6000 - PROGRAM PLANNING AND GENERAL ACTIVITIES

The aim of this program is to integrate education, service and research, which would be influenced and given greater potential by the "development of the active participation of the community as a mechanism for improving its own level of health," as outlined in the Ten-Year Health Plan for the Americas, thereby establishing the bases for a rational development of human resources in the health sector. It would also stimulate scientific research and technology adapted to the individual requirements of Member States, according to their own priorities, which would serve for the training of different levels and categories of health personnel.

The general objectives of the program are to promote, standardize, cooperate and channel efforts towards the preparation of development plans, strategies and feasibility studies and the acquisition of necessary information on the training of health personnel; the development, adaptation and dissemination of scientific and technical knowledge and education in the health sciences; the development of the infrastructure for institutionalized education and for research; personnel training; the development and execution of innovative programs with an interdisciplinary approach and a closer relationship between study and practical work, and dissemination of the experience gained; and the evaluation of educational programs.

The activities of this program comprise four main components: a) planning and administration of human resources; b) development of human resources; c) research; and d) technological resources.

Different planning patterns are adopted by the countries of Latin America and the Caribbean for the formulation of a human resources plan that will harmonize with and complement their own health plan, with the greatest possible degree of coordination between the health services and educational institutions. The aim of this process is to ensure that the best possible use is made of the countries' human resources and of their health services, which should have personnel of adequate quality and quantity to extend coverage, with special reference to training in primary medical care in the priority areas of family health, disease control and basic sanitation.

The Governments' decision to extend basic health services coverage to all populations has encountered various obstacles, one of which is the serious restriction on human resources. These are scarce, badly distributed and underutilized, with the countries lacking the rational bases for making a decision on developing the same.

The present organizational plans and administrative methods are obsolete and inefficient; decisions are guided more by intuition and crises than by a logical process; the problems of organizing and administering health systems and their related institutions increase day by day in number and complexity; approximately 80% of the 14,000 health care institutions are still under empirical administrations; and, there is a need for more and better trained administrators, capable of acting as agents of change for those innovative processes without which improvement is impossible.

The central objective of this program can be summarized in two complementary aspects: a) to cooperate with the countries in increasing the availability of their human resources and in assuring the most appropriate use of these resources, which would mean that the health services receive personnel in adequate numbers and of adequate quality to effect the extension of coverage, with special training in primary health care and priority in family health, disease control and basic sanitation; and b) to cooperate with the countries in training of personnel with management responsibilities at different levels, so as to improve the organization and administration of those services which constitute the health care systems.

The goal is not only to improve the efficiency of the present systems, but also to reorient these systems to face the complex problems of the present and the future. This constitutes one of the basic conditioning factors in the governments' decision to extend coverage with emphasis on primary health care, which should be expressed in concrete terms of adaptation, availability, accessibility and acceptability of the health services by the entire population. The extension of coverage entails the need to improve utilization of the scarce, available resources for health care by increasing their productivity, to raise the quality of the care provided, and to control increasing costs.

The specific objectives of the program are promoting coordination mechanisms and human resources planning processes; developing models for the analysis and estimation of human resources; promoting continuing education processes for human resources; providing coordination and development of a network of opportunities for the intensive and progressive training of a critical group of professional and technical personnel capable of undertaking institutional and operational changes in the health services (this would include executives at the central decision-making level, professionals responsible for the organization of activities of direct patient care, and administrators of support services); and, providing opportunities for advanced training and guided exchanges of experience for professionals actively involved in teaching and/or research activities in the various disciplines and areas which make up the vast field of health care administration.

Through this program, the following activities are being carried out in the countries: national and subregional analyses of the overall need for human resources; reinforcement through fellowships, seminars and standards from the human resources offices in the 12 countries where these actually function in different degrees of development; permanent registration of data on the present and prospective situations of human resources, with their interaction with other sectors such as education, labor, and social

welfare; development of alternative models for the utilization of human resources, from a qualitative and quantitative point of view, for professionals, technicians and auxiliary personnel; development of the capability of human resources offices in this Region's countries to program and coordinate multiprofessional programs of continuing education, by reinforcing staff, equipment and consultants in specific disciplines or areas; development of curricula and production of teaching materials for continuing education; national analyses to determine the need and planning for human and technological resources for the organization and administration of the health services; review of the objectives, content, sequence of units, methodologies for teaching and learning, and evaluation of the 30 present programs for administration of health care in the schools of public health, schools of administration and other institutions; coordination and support of the development of a network of Programs for Advanced Studies (Country-Kellogg Foundation-PAHO/WHO) and of Training in Administration of Health Care, through seminars, workshops, courses, and the dissemination of information; cooperation in the planning and development of intensive courses in medical and hospital care administration for personnel with management responsibilities at the various levels within the ministries of health, social security institutions, hospital associations and other institutions. These courses are especially important in those countries without schools of public health or where those schools do not offer regular specialty courses; and, development of an annual, regional (or subregional) seminar (or workshop) on "Innovations in Education and Training in Health Care Administration."

	1977	1978	1979
FUNDS BUDGETED	\$ 2,056,123	\$ 2,005,420	\$ 1,677,780
PER CENT OF TOTAL	2.9	3.2	2.6
PERSONNEL MONTHS	576	576	432
CONSULTANT MONTHS	80	58	32
FELLOWSHIP MONTHS	384	305	274
SEMINARS AND COURSES	\$ 82,193	\$ 78,550	\$ 68,800
SUPPLIES AND EQUIPMENT	\$ 92,447	\$ 56,523	\$ 48,000
GRANTS	\$ 22,000	\$ 18,000	\$ 15,000
OTHER	\$ 42,903	\$ 13,029	\$ -

---- PROJECTS ----

AMRO-6030	CUBA-6000	NICARAGUA-6001
AMRO-6040	HEADQUARTERS	PARAGUAY-6000
AMRO-6000	DOMINICAN REPUBLIC-6000	PERU-6000
BRAZIL-6000	ECUADOR-6000	URUGUAY-6001
BRAZIL-6001	EL SALVADOR-6000	VENEZUELA-6000
CHILE-6000	MEXICO-6000	
COLOMBIA-6000	NICARAGUA-6000	

6100 - PUBLIC HEALTH

The training of health personnel at all levels to permit carrying out those activities of health services and health care systems leading to increased regionalization and extension of coverage, has led to the creation of a great number of teaching and training programs in conjunction with the ministries of health, to the revision of educational programs in the schools of public health, and to new perspectives in postgraduate education within the departments of preventive and social medicine.

Educational programs need changes, as do new studies of health problems, the health services structure, and those mechanisms that provide true community participation in the solution of their problems. Consequently, teaching staff need to be trained in social and epidemiological research methods and in the methodology of teaching and learning in order to shape new teaching programs and to introduce the necessary modifications in existing programs. The promotion and support of postgraduate (Master's programs) development under new perspectives and the exchange of experiences will be the principal objectives of this program's activities.

In addition, this program contemplates support of the Latin American Association of Schools of Public Health as a mechanism of exchange, together with incorporation of postgraduate studies in preventive and social medicine into these schools, development of comparative studies and publication of informative material; promotion of meetings for the revision of preventive and social medicine programs within the schools of health sciences; provision of the necessary advisory services to teaching institutions, ministries of health, and health secretariats in this field; and, coordination of PAHO/WHO efforts with teaching institutions in the field of public health. Finally, the program coordinates the Latin American Program for Educational Development in Health, which is considering implementing 12 Nuclei for Research and Educational Development in Health in 10 countries of the Region, in collaboration with the Kellogg Foundation.

	1977	1978	1979
FUNDS BUDGETED	\$ 442,520	\$ 444,175	\$ 389,680
PER CENT OF TOTAL	.6	.7	.6
PERSONNEL MONTHS	24	24	24
CONSULTANT MONTHS	4	4	4
FELLOWSHIP MONTHS	66	55	58
SEMINARS AND COURSES	\$ 97,700	\$ 98,700	\$ 99,700
SUPPLIES AND EQUIPMENT	\$ 54,500	\$ 56,500	\$ 32,500
GRANTS	\$ 70,000	\$ 65,000	\$ 65,000
OTHER	\$ 96,000	\$ 96,000	\$ 48,000

---- PROJECTS ----

AMRO-6100	BOLIVIA-6100	URUGUAY-6100
AMRO-6101	CHILE-6100	VENEZUELA-6100
ARGENTINA-6100	PERU-6100	

6200 - MEDICINE

The separation between services (health practice) and training centers (practical education) is a basic problem in the development of the teaching-learning process at both undergraduate and postgraduate level. This leads, on the one hand, to isolation and only a partial view of health problems in the countries of the Region, and on the other, to the training of professional, technical and auxiliary cadres in separate institutions under a fragmented and isolationist approach which in the last analysis results in the personnel entering the health services preconditioned to an "individualistic" concept of their role.

The fundamental thrust of this program is on supporting the development of a process of training for health personnel which is based on the planning and execution of activities conducive to bringing together educational practice (teaching) and the practice of health (service). The program includes the following activities in the countries: performance of socioepidemiologic, biomedical, educational and administrative research of national, intercountry or regional scope and analysis and application of the results as basic parameters for the structuring of plans and programs for training professional, technical and auxiliary personnel; support and technical assistance to the countries in the preparation and implementation of programs for coordination or integration of instruction and service, with a view to bringing the students as soon as possible into a working environment and facilitating the conduction of programs for expansion of health services to the community; and collaboration in the formulation and implementation of study plans for the training of professional, technical and auxiliary medical personnel. Finally, technical cooperation is provided for the development of training institutions under integrated plans such as the Medical Campus Project in Nicaragua and the University Hospital Project in Honduras, with participation of the IDB.

	1977	1978	1979
FUNDS BUDGETED	\$ 453,855	\$ 456,985	\$ 496,660
PER CENT OF TOTAL	.6	.7	.8
PERSONNEL MONTHS	72	72	84
CONSULTANT MONTHS	20	19	16
FELLOWSHIP MONTHS	130	119	124
SEMINARS AND COURSES	\$ 45,500	\$ 45,870	\$ 42,080
SUPPLIES AND EQUIPMENT	\$ 21,207	\$ 17,010	\$ 18,750
GRANTS	\$ 58,213	\$ 31,000	\$ 16,500

---- PROJECTS ----

AMRO-6210	ARGENTINA-6200	PANAMA-6200
AMRO-6230	BOLIVIA-6200	PERU-6200
AMRO-6240	COSTA RICA-6200	PERU-6201
AMRO-6260	DOMINICAN REPUBLIC-6201	SURINAM-6200
AMRO-6200	GUATEMALA-6200	VENEZUELA-6200
AMRO-6270	HAITI-6200	
AMRO-6271	HONDURAS-6200	

6300 - NURSING

The low number of personnel trained and the lack of educational programs adapted to the current and predicted needs of the health services are fundamental aspects of the problem involved in the training of nursing personnel in the countries of Latin America and the Caribbean. In addition, there are the problems of lack of a clear identification and definition of the functions of health personnel and absence of long-range plans for the training of health personnel, resulting from a lack of coordination among the systems who render services. The scarcity of trained teaching personnel, of materials and of teaching equipment add a new dimension to the problem of providing and utilizing nursing and obstetrics personnel. The need to search for new perspectives and strategies for the solution of these problems is imperative and demands a high priority within this sector.

Through this program, advisory services will be provided to teaching programs in conjunction with teaching institutions; workshops at the country or intercountry levels will be promoted for the planning and articulation of training programs supporting the exchange of experiences, of educational material, and of studies on health problems and the activities of personnel within the health services. Postgraduate training programs and nursing teaching and research training in different specializations will continue to receive attention.

	1977	1978	1979
FUNDS BUDGETED	\$ 411,689	\$ 391,070	\$ 415,225
PER CENT OF TOTAL	.6	.6	.6
PERSONNEL MONTHS	84	72	72
CONSULTANT MONTHS	11	10	10
FELLOWSHIP MONTHS	46	43	48
SEMINARS AND COURSES	\$ 71,170	\$ 72,670	\$ 69,000
SUPPLIES AND EQUIPMENT	\$ 18,450	\$ 19,200	\$ 19,300
OTHER	\$ 15,000	\$ -	\$ -

---- PROJECTS ----

AMRO-6310	COSTA RICA-6300	PERU-6300
AMRO-6300	DOMINICAN REPUBLIC-6300	PERU-6301
AMRO-6370	ECUADOR-6300	VENEZUELA-6300
AMRO-6391	MEXICO-6300	
BOLIVIA-6300	PANAMA-6300	

6400 - ENVIRONMENTAL SCIENCES

The training and teaching of environmental health services personnel in the countries are decisive to the success of national programs for improvement of the environment. The Ten-Year Health Plan for the Americas gives high priority to this problem by establishing the following goals: training of 30,000 professionals and technicians through continuing education courses; training of 3,200 professionals through postgraduate courses; increasing to 2,000 the number of sanitary engineers working in environmental health programs and to 5,000 that of engineers participating in programs of water, sewerage and other services; and, increasing to 4,000 the number of health inspectors in the Region. In addition to these quantitative goals, the program has as a permanent and fundamental objective the strengthening of teaching institutions, based on what PAHO/WHO considers a 'continuing' education process.

The program seeks to strengthen sanitary engineering education in the schools of engineering and public health, establish a continent-wide system of continuing education, and stimulate an applied research program.

During the last five years, more than 500 short courses and 80 seminars and symposia have been held, benefitting 20,000 participants. Four thousand national professors collaborated, and PAHO/WHO cooperated with more than 300 short-term consultants and 400 staff professionals. A total of 66,000 hours of teaching and 1,500 million participant hours were reached.

	1977	1978	1979
FUNDS BUDGETED	\$ 251,335	\$ 253,295	\$ 284,860
PER CENT OF TOTAL	.4	.4	.4
PERSONNEL MONTHS	72	72	72
CONSULTANT MONTHS	19	17	17
FELLOWSHIP MONTHS	68	61	76
SEMINARS AND COURSES	\$ 62,900	\$ 53,700	\$ 50,145
SUPPLIES AND EQUIPMENT	\$ 18,300	\$ 24,155	\$ 21,565
GRANTS	\$ 2,500	\$ 2,500	\$ 5,850

---- PROJECTS ----

AMRO-2070	DOMINICAN REPUBLIC-6400	PANAMA-6400
AMRO-6400	ECUADOR-6400	PERU-6400
ARGENTINA-6400	GUATEMALA-6400	URUGUAY-6400
BELIZE-6400	HONDURAS-6400	VENEZUELA-6400
BOLIVIA-6400	JAMAICA-6400	
CHILE-6400	MEXICO-6400	
COSTA RICA-6400	NICARAGUA-6400	

6500 - VETERINARY MEDICINE

The insufficient number of veterinarians, duly trained in animal health planning and programming, continues to be an obstacle to any achievements in national animal health programs in the Americas. Schools and programs for veterinary training function to capacity, but do not satisfy the present and future demands.

The need for changes to improve the quality and quantity of these professionals has been the main objective of this program. Every year study groups meet, composed of professors from the diverse veterinary medicine specialties, in order to design and promote general guidelines, analyze present teaching procedures, establish standards for the integration of teaching, and contribute to modification of the same. Special attention will be given to the development of continuing education programs, so as to prepare the graduate veterinarian in specialized fields, in particular that of zoonoses control and programming and planning in animal health. In addition, support is given to the countries and their schools of veterinary medicine for the purpose of improving their educational and training plans and programs, not only at the professional but also at the technical and auxiliary levels.

	1977	1978	1979
FUNDS BUDGETED	\$ 471,310	\$ 453,730	\$ 401,695
PER CENT OF TOTAL	.7	.7	.6
PERSONNEL MONTHS	60	49	36
CONSULTANT MONTHS	16	17	17
FELLOWSHIP MONTHS	97	83	70
SEMINARS AND COURSES	\$ 41,000	\$ 34,600	\$ 35,750
SUPPLIES AND EQUIPMENT	\$ 61,640	\$ 63,000	\$ 48,315
OTHER	\$ 7,040	\$ 11,000	\$ 10,500

---- PROJECTS ----

AMRO-6500	GUATEMALA-6500	VENEZUELA-6500
AMRO-6570	MEXICO-6500	
AMRO-6580	PERU-6500	
BOLIVIA-6500	TRINIDAD AND TOBAGO-6500	

6600 - DENTISTRY

Dentistry professionals have congregated in urban areas; and, consequently, the lack of dental services is characteristic of rural areas and of marginal groups in urban areas. Dentistry faculties have begun modifying their programs of study along the lines of modern educational concepts, but they are not in possession of the necessary information and their resources are insufficient. There is also an appreciable lack of auxiliary personnel in this field.

The objectives of this program are to improve the quality of the education and of the educators as well as modernize and adapt the program of study; to facilitate updated information on prevailing tendencies in dental techniques which, together with the dentistry component of the Latin American Centers for Educational Technology in Health, will permit improvement of the education received at schools of dentistry. The program also promotes the creation of continuing education programs, a greater adaptation of the training for dentists to national requirements, and the establishment of a network of national projects related to "Innovations in Dental Education" in collaboration with the Kellogg Foundation.

	1977	1978	1979
FUNDS BUDGETED	\$ 446,257	\$ 338,885	\$ 229,500
PER CENT OF TOTAL	.6	.5	.4
PERSONNEL MONTHS	59	52	24
CONSULTANT MONTHS	13	13	14
FELLOWSHIP MONTHS	104	74	68
SEMINARS AND COURSES	\$ 52,800	\$ 47,400	\$ 45,050
SUPPLIES AND EQUIPMENT	\$ 98,977	\$ 27,300	\$ 30,790
GRANTS	\$ 21,000	\$ 21,000	\$ 21,000
OTHER	\$ 3,000	\$ 3,000	\$ 3,000

---- PROJECTS ----

AMRO-6600	BRAZIL-6601	PANAMA-6600
AMRO-6601	CHILE-6601	PERU-6600
AMRO-6670	COLOMBIA-6601	TRINIDAD AND TOBAGO-6600
BARBADOS-6600	ECUADOR-6600	VENEZUELA-6600
BOLIVIA-6600	GUATEMALA-6600	
BRAZIL-6600	JAMAICA-6600	

6700 - BIostatISTICS

For several years, PAHO/WHO has stimulated the development of statistics education within the health sciences by supporting the schools--primarily of medicine and public health--in the Region in their training of teaching personnel and in the development of plans and programs of study at the undergraduate as well as postgraduate levels, the latter especially oriented to the use of statistical methodology in scientific research. To date, results have been quite satisfactory, and in the majority of the schools of medicine and public health in the Region, application of statistics to health problems is being taught.

For present and future years, the objectives of this program are to continue developing teaching of statistics at the aforementioned schools; to extend this support to the schools of other health sciences professions; and, to begin stimulating the schools for technical and auxiliary personnel to develop basic programs for statistical training, preparing health personnel at this level to better understand their participation in the collection of data, in epidemiological surveillance, and in scientific research. The program will also continue to promote short statistics courses oriented toward scientific research.

Finally, attempts will be made to develop some modules of self-instruction for training on a large scale in collaboration with the programming area of technological resources.

	1977	1978	1979
FUNDS BUDGETED	\$ 2,700	\$ 3,000	\$ 3,400
PER CENT OF TOTAL	-	-	*
CONSULTANT MONTHS	1	1	1

---- PROJECTS ----

AMRO-6700

6900 - OTHER HEALTH PERSONNEL

Within this program are the activities to develop the human resources needed for the implementation of specific plans to train the personnel seriously lacking in certain countries or subregions. Thus, in view of the recognition by the Ministers of Health of the English-speaking Caribbean countries that one of the obstacles to better delivery of health care in the Caribbean is the scarcity of properly qualified technical and auxiliary personnel, a planned program of education and training is being carried on especially for this type of personnel. PAHO/WHO and UNDP are providing technical and financial assistance for the program.

It has been also found that, despite the importance of immunology in the diagnosis and treatment of infectious diseases, the countries of the Region do not have enough properly trained personnel to carry out the immunological techniques. For that reason, two centers for research and training in immunology have been set up under this program which, besides carrying out research in this field, will hold training and retraining courses for different categories of health personnel.

Technical assistance is also provided in connection with the training of intermediate technical personnel for the Andean Pact countries, under the Hipolito Unanue Agreement, at the request of the governments of these countries, which have assigned priority to the training of this type of personnel over the next few years. It should be pointed out that efforts in this direction are also being made in Cuba and in other countries of the Region.

Also included in this program category are efforts in the areas of training health administrators and statisticians.

	1977	1978	1979
FUNDS BUDGETED	\$ 452,132	\$ 570,330	\$ 426,270
PER CENT OF TOTAL	.6	.9	.7
PERSONNEL MONTHS	74	72	72
CONSULTANT MONTHS	9	36	16
FELLOWSHIP MONTHS	165	93	76
SEMINARS AND COURSES	\$ 11,557	\$ 6,000	\$ 6,000
SUPPLIES AND EQUIPMENT	\$ 30,750	\$ 105,900	\$ 51,490
GRANTS	\$ 15,000	\$ 15,000	\$ 14,000
OTHER	\$ 32,500	\$ 32,500	\$ 29,500

---- PROJECTS ----

AMRO-6910
BRAZIL-6900

COLOMBIA-6900
HONDURAS-6900

MEXICO-6900

Physical Resources

7300 - PRODUCTION OF BIOLOGICALS

While considerable improvement has been evidenced in many of the government laboratories in the 14 Latin American countries producing biologicals, a number of laboratories continue to manufacture these products under unsatisfactory conditions. At present the Region is self-sufficient in yellow fever, smallpox and cholera vaccines, but there is still an acute shortage of all other biological products, including DPT, poliomyelitis and measles vaccines.

PAHO/WHO programs are directed towards the continued improvement and expansion of biological production facilities. Direct advisory services are provided at all times. Within budgetary limitations, PAHO/WHO provides funds for special equipment, fellowships and consultants. Its main efforts continue to be directed towards the development and improvement of proper biologicals control systems. Additionally, the Organization provides manuals to producing laboratories to serve as guidelines for the production and control of an increasing number of vaccines and antisera. It continues to provide biological standards and arrange for the testing of finished vaccines.

Regional PAHO/WHO laboratories, such as those of CEPANZO and PANAFOTSA, provide training in production and control procedures and act as reference centers for controlling BCG, tuberculosis, rabies and foot-and-mouth disease vaccines.

	1977	1978	1979
FUNDS BUDGETED	\$ 535,600	\$ 480,011	\$ 356,090
PER CENT OF TOTAL	.8	.8	.6
PERSONNEL MONTHS	66	62	60
CONSULTANT MONTHS	27	20	9
FELLOWSHIP MONTHS	59	82	42
SUPPLIES AND EQUIPMENT	\$ 175,828	\$ 121,832	\$ 62,540
OTHER	\$ 4,933	\$ 4,000	\$ 1,500

---- PROJECTS ----

AMRO-7300
AMRO-7301
CHILE-7300
CUBA-7200

CUBA-7300
HAITI-7300
MEXICO-7300
MEXICO-7301

VENEZUELA-7300

7400 - MAINTENANCE OF HEALTH CARE FACILITIES

The objectives of this program are to formulate policies and create regional biomedical engineering and hospital maintenance services, in order to facilitate construction, preservation and calibration of hospital and other health establishment installations and equipment; to promote professional and technical-level training programs in biomedical engineering and maintenance; to set up engineering and maintenance services in hospitals at the regional and country level and to disseminate information on biomedical engineering and hospital maintenance, by means of publications which will encourage technical innovations in the field of biomedical instrumentation.

PAHO/WHO will continue to provide technical assistance in connection with the training of intermediate technical personnel for countries which have assigned priority to the training of this type of personnel.

In general, the programs must regionalize the maintenance and engineering services, train engineers and technicians in biomedical engineering, hold training and retraining courses for different categories of health personnel, and undertake special studies and research on biomedical engineering.

	1977	1978	1979
FUNDS BUDGETED	\$ 332,535	\$ 182,095	\$ 142,745
PER CENT OF TOTAL	.5	.3	.2
PERSONNEL MONTHS	76	48	36
CONSULTANT MONTHS	9	2	2
FELLOWSHIP MONTHS	49	3	3
SEMINARS AND COURSES	\$ 6,000	\$ 6,000	\$ 6,000
SUPPLIES AND EQUIPMENT	\$ 10,250	\$ 770	\$ 750
OTHER	\$ 600	\$ -	\$ -

---- PROJECTS ----

AMRO-7400
COLOMBIA-7200
COLOMBIA-7400

JAMAICA-7400
PERU-7400
TRINIDAD AND TOBAGO-7400

URUGUAY-7400
VENEZUELA-7400

7800 - FINANCIAL RESOURCES

The purpose of the project is to assist the countries of the Region in solving the two main problems they face: the equitable and effective financing of the development of health service systems so that they can achieve the hemispheric goal of providing all the population with health coverage and of continually improving its quality; and the modernization and reorganization of financing plans in the countries that have attained reasonable coverage goals so that they can make them more efficient and more equitable.

The program was begun in 1976 in Haiti with a preliminary study of output and costs in the Cap. Haitien Hospital; in El Salvador, with an analysis of the financing of the Social Security System; and in Nicaragua, with advisory services preparatory to technical cooperation in 1977 for the preparation of a loan application to be submitted to IDB. In Ecuador, the team that prepared the loan application the Government submitted to the IDB was provided with technical cooperation in preparing a study of the feasibility and socioeconomic impacts of the project for the extension of coverage. In Honduras, the advisory services provided last year in establishing a system for the analysis of resources, production, efficiency and costs of the health sector were continued.

In 1977, assistance will again be given to Ecuador, El Salvador, Haiti, Honduras, Nicaragua and Paraguay, and activities will be started in the Dominican Republic and Panama.

	1977	1978	1979
FUNDS BUDGETED	\$ 69,875	\$ 73,955	\$ 78,280
PER CENT OF TOTAL	.1	.1	.1
PERSONNEL MONTHS	24	24	24
CONSULTANT MONTHS	2	2	2

---- PROJECTS ----

AMRO-7800

Technological Resources

8000 - PROGRAM PLANNING AND GENERAL ACTIVITIES

The basic purpose of this program is to coordinate activities directed to the development of technological resources in the countries of the Region to facilitate communication in science and education. Its objectives are: a) to promote the development of standards and procedures for guiding the process of scientific and technological communication in the field of health in keeping with the needs of the Member Countries; b) to promote coordination of the educational technology center (CLATES, in Rio de Janeiro and Mexico City) and the biomedical information center (BIREME) with similar programs implemented at the national level through the Latin American Educational Development Program; c) to support the development at national level of educational technology activities, at the request of individual countries; d) to coordinate the technical advisory services provided to educational technology and biomedical information centers; e) to furnish direct technical advisory services to the PAHO/WHO Textbook Program and promote its development, selecting the textbooks to be used and evaluating the results achieved, both at professional levels and the levels of technical and auxiliary personnel to be utilized in the program. These direct technical advisory services are supplemented by recommendations of textbook selection committees whose meetings are called and conducted under this project. These committees, in addition to selecting the books, are responsible for performing analyses of the instruction in the various health science disciplines. They also develop procedures within the Organization and in the countries of the Region to facilitate the selection of instructional materials (textbooks or audiovisual aids, etc.) for the technical and auxiliary levels of health personnel; f) to furnish technical advisory services to the program for provision of basic medical equipment to students of the health sciences, through promotion of the program, assistance in the selection of equipment, and evaluation of the results of the program in terms of improvement of the learning process; g) to issue the Journal Educación Médica y Salud with the aim of disseminating scientific reports on work being done in the countries of the Region in the training field.

To accomplish these objectives, PAHO/WHO is prepared to provide technical advisory services and financial assistance to requesting countries, either directly or through the educational technology and paramedical information centers. It will also provide technical and financial assistance, within its possibilities, for the holding of workshops and seminars at local and central levels on implementation of activities in the area of scientific and educational communications. Lastly, this program will convene meetings of textbook selection committees and provide an interdivisional team for selection of teaching materials.

	1977	1978	1979
FUNDS BUDGETED	\$ 107,595	\$ 115,115	\$ 128,850
PER CENT OF TOTAL	.2	.2	.2
PERSONNEL MONTHS	36	36	36
CONSULTANT MONTHS	5	5	5
SEMINARS AND COURSES	\$ 7,000	\$ 8,000	\$ 8,000
SUPPLIES AND EQUIPMENT	\$ 8,380	\$ 8,400	\$ 8,700

--- PROJECTS ---

AMRO-8000

Textbooks and Other Teaching Materials

8100 - MEDICAL TEXTBOOKS

The objectives of the program are to develop the Textbook Program by providing the necessary technical advisory services in selection of textbooks consistent with the principles of curriculum integration and work-study; to promote the use of textbooks in order to ensure coverage, not only of contents, but of supply to medical and nursing schools; to encourage the utilization of basic clinical instructional equipment in the schools of health sciences in Latin America; to continue to produce other instructional materials such as filmstrips; and to coordinate better distribution in the intermediate- and tertiary-level schools of health in Latin America.

The main activities of this program are the distribution and low-cost sale of instructional materials, including textbooks, and clinical diagnostic equipment. At least one title has been made available in each of the basic and clinical subjects which constitute the medical school curriculum, and over 151 medical schools were participating in the program during 1976, with a total enrollment of over 150,000 students. Twenty-two traditional textbooks were offered for sale during the year in Spanish and four in Portuguese. The program has now expanded from total sales of fewer than 10,000 books in 1969 to nearly 90,000 in 1976, bringing the cumulative total to almost 300,000. As a result of this growth, program financing has been severely strained, and additional capital is being sought from the IDB and other sources for the preparation of instructional materials for use, mainly, of technical and auxiliary personnel, to extend coverage of health services in the countries.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,723,035	\$ 1,945,710	\$ 2,173,455
PER CENT OF TOTAL	2.4	3.1	3.4
PERSONNEL MONTHS	120	120	120
CONSULTANT MONTHS	2	2	2
SUPPLIES AND EQUIPMENT	\$ 1,396,620	\$ 1,610,000	\$ 1,815,000
OTHER	\$ 117,000	\$ 107,000	\$ 108,000

--- PROJECTS ---

AMRO-8100

BRAZIL-8100

8300 - TEXTBOOKS: NURSING

At the present time the program is providing books on four aspects of clinical nursing. In 1974, 120 nursing schools were incorporated into the project. For 1976, over 12,000 books were sold at 161 schools in 18 countries of the Region, with an estimated enrollment of 30,000 students, and seven areas of nursing were covered.

Four textbooks were offered through the program and two more were translated from English into Spanish for sale in late 1976. By 1977, all areas of the basic nursing curriculum should be covered by the program, with a total participation of over 200 schools.

	1977	1978	1979
FUNDS BUDGETED	\$ 188,000	\$ 235,000	\$ 292,000
PER CENT OF TOTAL	.3	.4	.5
CONSULTANT MONTHS	4	4	4
SUPPLIES AND EQUIPMENT	\$ 162,000	\$ 202,500	\$ 253,000
OTHER	\$ 3,000	\$ 5,000	\$ 7,000

--- PROJECTS ---

AMRO-8300

8400 - OTHER TEACHING MATERIALS

For the time being this program is limited to PAHEF's activities in providing equipment for dental schools and for veterinary medicine education.

	1977	1978	1979
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FUNDS BUDGETED	\$ 58,142	\$ -	\$ -
PER CENT OF TOTAL	.1	-	-
SUPPLIES AND EQUIPMENT	\$ 58,142	\$ -	\$ -
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	PROJECTS		

8500 - REGIONAL LIBRARIES

This program is designed to facilitate the application of scientific knowledge through the use of modern methods and procedures for collecting, storing and disseminating information. With this in view, the Organization is endeavoring to develop the health science libraries to a point where self-sufficiency will be reached in each country. PAHO/WHO is particularly interested in developing BIREME in São Paulo, Brazil as the region-wide health information center for Latin America. It is also endeavoring to promote the establishment of BIREME subcenters in Brazil and other Latin American countries to provide documentation and information needed for research and education, so as to create an effective information network.

The MEDLINE System, now operative, should augment the capacity to disseminate biomedical information. Parallel to these activities, BIREME offers course for librarians and other auxiliary staff with the aim of increasing the productivity of libraries in the countries.

In connection with the program objectives, special mention should be made of a number of interdivisional activities carried out with the support of BIREME and the National Information and Documentation Centers for the purpose of disseminating information to health workers at all levels and categories on the major subjects relating to the priority areas of maternal and child health, infectious diseases, nutrition and environmental sanitation with the ultimate aim of expanding coverage, thus providing effective support to a process of continuing education for such staff.

PAHO/WHO also maintains a reference library in its Washington Office, as well as reference materials in its centers and other offices.

	1977	1978	1979
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FUNDS BUDGETED	\$ 1,143,277	\$ 809,865	\$ 835,415
PER CENT OF TOTAL	1.6	1.3	1.3
PERSONNEL MONTHS	144	144	144
CONSULTANT MONTHS	1	2	2
FELLOWSHIP MONTHS	6	22	21
SEMINARS AND COURSES	\$ 22,880	\$ 25,415	\$ 23,990
SUPPLIES AND EQUIPMENT	\$ 371,861	\$ 134,000	\$ 134,000
OTHER	\$ 366,160	\$ 226,700	\$ 226,700

----- PROJECTS -----

AMRO-8500 ARGENTINA-8500
AMRO-8570

8600 - EDITORIAL SERVICES

The PAHO/WHO program of publications includes a wide variety of monographs and other scientific publications, in addition to the series of official documents and five periodical publications: the monthly Spanish Boletín de la OPS, the quarterly English Bulletin of PAHO, the quarterly Spanish journal Educación Médica y Salud, the English and Spanish editions of the quarterly Pan American Health, and the bilingual Weekly Epidemiological Report.

	1977	1978	1979
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FUNDS BUDGETED	\$ 1,097,640	\$ 1,158,555	\$ 1,256,970
PER CENT OF TOTAL	1.6	1.8	2.0
PERSONNEL MONTHS	456	456	456
SUPPLIES AND EQUIPMENT	\$ 21,500	\$ 23,500	\$ 25,500
OTHER	\$ 223,750	\$ 228,500	\$ 233,385

----- PROJECTS -----

AMRO-8600

HEADQUARTERS

8700 - OTHER TECHNOLOGICAL RESOURCES

The basic objective of this program is the application of appropriate education and health technology to the teaching-learning process of health personnel. It also seeks to help create a Latin American regional system by means of which suitable technology can be quickly assimilated and adapted to the actual needs of individual countries, depending on the educational problems. It is through the Latin American program of educational development and the educational components of the Nuclei for Research and Development in Education and Health (NIDES) that this information is to be disseminated so as to permit the health science schools to give their students high-quality instruction and thus meet the enormous demand for studies in this field which is becoming evident in the countries of the Region, as well as enabling them to respond to manpower needs of priority programs in maternal and child health, infectious diseases, environmental sanitation, nutrition and basic medical care in terms of expanded coverage. The Latin American Centers of Educational Technology for Health (CLATES) in Rio de Janeiro and Mexico City, which are one of the pillars of this program, will continue to receive support on technical advice to enable them, through the NIDES, to promote the development of the educational process, train teaching personnel, produce the educational materials designed by the NIDES and advise them on educational research.

The objectives of the CLATES in Rio de Janeiro and Mexico City are to organize and hold teacher-training courses on the use of new educational theories and modern educational technology; to design health science courses with emphasis on goal-setting and the most useful strategies and tactics for achieving goals of the teaching-learning process; to design self-education courses in health sciences and try to individualize the educational process; to carry on courses in programmed instruction and the preparation of instructional kits using audiovisual aids; to develop teaching models using simulation techniques; to develop courses and models using computers as aids in the teaching-learning process; and to design and carry out educational research on the use of instructional resources and on training evaluation.

Of special note is the effort being made by the CLATES in Rio de Janeiro to develop a system for large-scale training of personnel. This system, to be based on an analysis of functions, will rely mainly on self-instruction and will include an evaluation of the student's performance of his duties. Fifty instruction models have been designed for large-scale training of health administrators at the local level. A new program is being prepared for the training of technical and auxiliary staff required for expansion of coverage.

This area includes the program of educational technology for nursing as well, which is creating a system of dissemination through the establishment of subcenters or nuclei for educational technology in nursing schools of Latin America. At the present time, six of these nursing subcenters are in operation in five countries, and by 1977 it is planned to have 20 subcenters in operation incorporating a reasonable number of "satellite schools". A system for the interchange of experience and of the instructional materials used by the subcenters will also be set up.

A recent addition in this field is a program on innovations in the teaching of dentistry, operating with financial assistance from the Kellogg Foundation, which will work very closely with the CLATES and, at regional level, with subcenters in individual countries.

	1977	1978	1979
FUNDS BUDGETED	\$ 374,430	\$ 246,175	\$ 203,667
PER CENT OF TOTAL	.5	.4	.3
PERSONNEL MONTHS	48	36	36
CONSULTANT MONTHS	7	4	3
FELLOWSHIP MONTHS	60	48	28
SEMINARS AND COURSES	\$ 35,369	\$ 22,750	\$ 4,224
SUPPLIES AND EQUIPMENT	\$ 76,418	\$ 33,600	\$ 19,361
GRANTS	\$ 12,000	\$ 12,000	\$ 12,000
OTHER	\$ 25,979	\$ -	\$ -
---- PROJECTS ----			
AMRO-8701	BRAZIL-8700	MEXICO-8701	
AMRO-8770	MEXICO-8700		

8900 - RESEARCH COORDINATION

Research, as an organized activity of PAHO/WHO, was 15 years old in 1976. The program now represents an investment of approximately US\$5 million a year on research and research training schemes in a wide variety of subjects relevant to health problems in the Americas. The new edition of *Research in Progress 1976* shows 151 summary projects ranging from basic laboratory research to clinical, epidemiologic and methodologic studies in which the Organization currently participates as grantor, grantee or collaborator. Throughout these years the program has focused on stimulation and support of biomedical research and research training, with emphasis on collaborative multinational projects that attempt to solve problems of special importance for Latin America and the Caribbean; strengthening of biomedical communications and resources through scientific meetings and the provision of modern bibliographic and other library services; promotion and application of operations research to improve the efficiency of health facilities and programs; and promotion of socioepidemiological research.

The program dwelt initially on a systematic review of needs and opportunities for research in practically all fields in which PAHO/WHO had a commitment and addressed itself to assessing the state of knowledge in the field and the areas of ignorance, to finding which current research attempted to fill the gaps in knowledge and which areas merited PAHO/WHO support. This continuing activity has resulted in the publication of 216 major technical reports and 31 scientific monographs. Within the constraints of the limited research funds from the PAHO/WHO regular budget or obtained from outside sources, the Organization has made a sustained effort to implement the recommendations of the many consultants who assisted it in developing the program, after appropriate scrutiny and endorsement by the PAHO Advisory Committee on Medical Research (ACMR).

The ACMR, at its XV Meeting in Brasilia in June 1976, reconsidered the role it should be playing in the Organization's research program and, in the light of the recommendations made by the Director of PAHO accepted additional responsibilities and agreed to regard itself as operating continuously throughout the year, and not simply at its annual meetings. In the next four years, research strategies will be developed in relation to the priority areas designated by the Director, e.g., health services research, and expansion and strengthening of the coverage of health services to rural and underserved populations. During the coming year, the Committee will be exploring possibilities of establishing community-centered research projects in Latin America, particularly those that involve family health. In the overall strategy to be adopted by the ACMR, priority will also be given to three vital areas: communicable diseases, nutrition and human ecology. Individual members of the Committee will take on the responsibility of initiating new policy reviews in these three fields, through the establishment of subcommittees or working groups, and the preparation of a preliminary policy document to be presented at the next meeting of the ACMR.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 324,610	\$ 340,455	\$ 349,340
PER CENT OF TOTAL	.5	.5	.5
PERSONNEL MONTHS	72	72	72
CONSULTANT MONTHS	3	4	3
FELLOWSHIP MONTHS	3	3	3
SEMINARS AND COURSES	\$ 36,000	\$ 36,000	\$ 36,000
SUPPLIES AND EQUIPMENT	\$ 2,000	\$ 3,000	\$ 2,000
GRANTS	\$ 102,000	\$ 102,000	\$ 102,000

---- PROJECTS ----

AMRO-8900
AMRO-8901

COLOMBIA-8900

III. ADMINISTRATIVE DIRECTION

9100 - EXECUTIVE AND TECHNICAL DIRECTION

Executive and technical direction is involved primarily with the technical content of programs requested by Member Governments rather than with routine day-to-day administration. In order to illustrate this direction, a separate category has been established to show these functions and costs of the Director's office and the office of the Chief of Administration, excluding liaison and public information activities, as distinct from general administrative activities. This grouping contains provisions for the Headquarters Program Committee, which acts in an advisory capacity to the Director in regard to the overall development of program and research activities. Provisions for program analysis and expediting of activities are also included.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 643,875	\$ 755,435	\$ 875,895
PER CENT OF TOTAL	.9	1.2	1.4
PERSONNEL MONTHS	216	252	252
OTHER	\$ 56,300	\$ 58,415	\$ 60,635

---- PROJECTS ----

HEADQUARTERS

9200 - PROGRAM SERVICES

Program services are not distributed into specific programs since they are in support of all the technical programs. These services have, therefore, been grouped under this category to facilitate review and administration. The functions and costs involved are those related to project agreements and reporting, liaison with other international organizations, and public information activities.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 462,870	\$ 492,500	\$ 523,435
PER CENT OF TOTAL	.7	.8	.8
PERSONNEL MONTHS	180	180	180
OTHER	\$ 85,475	\$ 91,025	\$ 96,875

---- PROJECTS ----

HEADQUARTERS

9300 - ADMINISTRATIVE SERVICES

Administrative services are designed to free program staff for technical services, relieving them of as much administrative detail as possible. Personnel and accounting activities are centralized, and budget allotments, other than those that must necessarily be shown in dollars, are issued to program staff in terms of the elements needed to carry out the program. This procedure has facilitated the operation of Area and Country Offices with minimum administrative staff. This category includes the Department of Management and Computer Services, the Department of Budget and Finance, the Department of Conference and General Services, the Department of Personnel, and the Procurement Office, as well as the administrative portions of the Area Offices.

	1977	1978	1979
FUNDS BUDGETED	\$ 3,878,320	\$ 4,155,310	\$ 4,553,470
PER CENT OF TOTAL	5.5	6.7	7.1
PERSONNEL MONTHS	2484	2490	2484

---- PROJECTS ----

AREA OFFICES	HEADQUARTERS
--------------	--------------

9400 - GENERAL EXPENSES

This category includes continuing general supplies, contractual services, equipment, rentals, utilities, and comparable items normally referred to as Common Services, for Headquarters and the Area Offices.

	1977	1978	1979
FUNDS BUDGETED	\$ 1,993,840	\$ 2,044,075	\$ 2,139,325
PER CENT OF TOTAL	2.8	3.3	3.3
SUPPLIES AND EQUIPMENT	\$ 239,905	\$ 250,620	\$ 263,150
OTHER	\$ 1,753,935	\$ 1,793,455	\$ 1,876,175

---- PROJECTS ----

AREA OFFICES	HEADQUARTERS
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IV. GOVERNING BODIES

9500 - GOVERNING BODIES

The Pan American Health Organization is governed by the Pan American Sanitary Conference, which meets every four years. The Directing Council acts for the Conference in the intervening years. In addition, the Executive Committee of the Directing Council holds two regular meetings every year. By agreement with the World Health Organization, these Governing Bodies also serve as the Regional Committee of the World Health Organization. The category "Governing Bodies" covers the cost of scheduled meetings and supporting staff. The staff also supports other seminars and conferences as time allows. This category is reflected as Part IV of the budget document.

	1977	1978	1979
FUNDS BUDGETED	\$ 553,820	\$ 588,100	\$ 646,830
PER CENT OF TOTAL	.8	.9	1.0
PERSONNEL MONTHS	168	168	168
SUPPLIES AND EQUIPMENT	\$ 17,500	\$ 17,500	\$ 17,500
OTHER	\$ 215,700	\$ 215,700	\$ 215,700

---- PROJECTS ----

HEADQUARTERS

V. INCREASE TO ASSETS

9600 - INCREASE TO ASSETS

Under this category is shown the amount for increasing the Working Capital Fund in accordance with Resolution VII of the XI Meeting of the Directing Council. It is shown as Part V of the budget document.

	1977	1978	1979
	-----	-----	-----
FUNDS BUDGETED	\$ 650,000	\$ 500,000	\$ 500,000
PER CENT OF TOTAL	.9	.8	.8

---- PROJECTS ----

HEADQUARTERS

PART I PROGRAM OF SERVICES

PART II DEVELOPMENT OF THE INFRASTRUCTURE

PART III ADMINISTRATIVE DIRECTION

DETAIL BY COUNTRY PROJECT

ARGENTINA

Argentina is a federal republic consisting of the Capital District, 22 provinces and a national territory comprising Tierra del Fuego, part of Antarctica and the islands of the South Atlantic. It has an area of 3,761,274 km². In 1975 it had an estimated population of 25,383,803 inhabitants and a population density of 9.1 per km². Some 21% of the population lives in communities with less than 2,000 inhabitants and as scattered population. The urbanization rate is high, and just over one-third of the population lives in the capital city.

The annual natural population increase is 1.3%, the difference between the birth rate (21.6 per 1,000 inhabitants) death rate (9.5 per 1,000 inhabitants) and migrations. Life expectancy at birth is 68.2 years. Children under one year of age represent 2.2% of the total population; children under 15 years of age represent 29.3%, and, together with the female population of childbearing age (25.2%), account for 54.5% of the population covered by maternal and child health programs. The economically active population is 50.4% of the total population over 10 years of age; persons aged 50 years and more account for 20.3%, and those aged 65 and more, 7.9% of the total population. The most recent child mortality figure - that for 1970 - is 63.3 per 1,000 live births. Since then, some provinces have reported sharp declines, but no overall information is available.

In 1975 the per capita GDP was US\$1,144 or 1.3% lower than in 1974. The primary sector employs 15% of the active population and the secondary sector 29%. In 1975 exports fell to US\$2,961 million, as opposed to imports of US\$3,946 million, a difference of US\$985 million; this trend was reversed in 1976, when a surplus of about US\$800 million is expected.

The new Government that has taken office is reviewing the measures adopted earlier and their results and is applying new criteria internally; decisive steps have been taken to control inflation and to promote the recovery of the country's economy. A Ministry of Planning has just been established. Guidelines have been issued for the development of education at three levels, and a uniform policy for public and private education has been established.

In the health sector, it has been decided to formulate a national health plan. The organization of the Secretaría de Estado de Salud Pública has been revised, and steps are being taken to gradually re-establish its national leadership role in the execution of programs. The results obtained by the Integrated National Health System are being evaluated, and efforts are being made in the provinces in which it operates to coordinate national, provincial and municipal resources and those of social institutions. The Government wishes to revise social institutions in the rest of the country, including their management, multiplicity and difference in services, and their relationship with the public sector and to introduce changes that will rationalize their activities. The health infrastructure has been found to be in large measure obsolete, and the health sector needs substantial additional physical facilities, equipment, well-trained personnel and supplies; at present there are no proper maintenance plans. In all these activities, FAO/WHO is providing substantial collaboration.

Health protection is an important objective of the Government; the primary activities for this purpose are the reactivation of the national measles and poliomyelitis vaccination campaigns and coordinated and efficient epidemiological surveillance throughout the country. For several years, Argentina has been free of the four diseases to which the International Health Regulations apply (smallpox, yellow fever, plague, cholera). Of the diseases subject to international surveillance, the influenza outbreak in 1975 was within normal limits. The number of cases of meningococcal meningitis is gradually increasing. There was one confirmed case of poliomyelitis in 1974 and five, in 1975. Malaria continued its downward trend, which holds out promise for its eradication; there are only small residual foci in Salta and Jujuy. Tuberculosis mortality continues to decrease, although there are sharp differences between the capital and certain provinces, especially the northern provinces. Leprosy prevalence is still below 1.0 per 1,000 population. Cases of tetanus of the newborn continued to occur and are important because they can be eliminated. Measles cases increased in 1976 because the vaccination campaign had been suspended in the previous year. Infectious hepatitis is increasing, as are sexually transmitted diseases. Chronic diseases are a matter of concern, especially those reflected in the mortality structure of the country, primarily arterial hypertension and rheumatic disease, diabetes and cancer.

The area in which Chagas' disease is found represents 70% of the continental territory of the country, i.e., 2,100,000 km². In this vast area, the number of persons exposed to the disease is estimated at 11,000,000 and the number of infected at 2,500,000. Of this total, 15% suffer from the progressive chronic form of the disease, fundamentally a chronic cardiopathy (375,000 persons in all).

In the preliminary draft of the budget for 1977, ARG\$731,997,000 has been earmarked for operations and investments, and ARG\$254,687,589 for personnel expenses. Activities have been planned in 19 provinces (Catamarca, Córdoba, Jujuy, Salta, San Juan, Santa Fe, Santiago del Estero, Tucumán, Chaco, La Rioja, San Luis, Corrientes, Entre Ríos, Formosa, La Pampa, Mendoza, Misiones, Neuquén and Río Negro).

Maternal and child health is another prime concern of the Government, and therefore activities aimed at promoting the better physical and mental health of pregnant women and children are encouraged. Malnutrition, which is of little importance in the national context, does, however, appear to be a persistent conditioning factor in infant mortality in some areas of the country. In the urban sector, obesity and other pathological conditions resulting from overnutrition are important problems; it is estimated that 20% of the population is overweight. Efforts are being made to formulate intersectoral food and nutrition guidelines. 9.4% of the budget of the Secretaría de Estado de Salud Pública is for maternal and child health.

In the mental health field, epidemiological surveys, including appraisals of the situation, are being made; investigations are underway in specific fields, and programs for the recovery of mental health and for prevention in community centers, with special attention to alcoholism, drug addiction, mental deficiency and the like, are being revised. In the area of dental health, steps are being taken to expand coverage and to increase preventive services.

In the field of environmental sanitation, the Government is undertaking large-scale activities to promote and maintain the quality of water, soil and air, and to prevent their contamination; these environmental betterment programs are intersectoral and are carried out in particular in connection with projects for the construction of large dams. Within the Secretaría de Obras Públicas y Transportes of the Ministerio de Economía, there are two basic areas for environmental sanitation; the Subsecretaría de Recursos Hídricos, which is concerned with the management of water resources and whose sphere of action includes such important agencies as Obras Sanitarias de la Nación, Instituto Nacional de Ciencia y Técnica Hídricas, Servicio Nacional de Agua Potable y Saneamiento Rural; and Subsecretaría de Planeamiento Ambiental, whose functions include aspects derived from large-scale water projects. Together with the Dirección Nacional de Saneamiento of the Secretaría de Estado de Salud Pública, these agencies are empowered to carry out activities for environmental management at the national level and receive support from provincial and municipal agencies in carrying out their programs. More than 80% of the urban population and 32% of the rural population have water service. No significant progress has been made in the management of industrial wastes, both liquid and solid, but considerable efforts have been made in this regard in the field of programming and training. In other fields of environmental sanitation, the situation remains unchanged. The Comisión Multisectorial de Prevención de Accidentes del Tránsito is continuing its studies with a view to the analysis and control of this problem of growing importance.

The institutions providing public health services are under the direction of the Secretaría de Estado de Salud Pública, the provincial and municipal authorities. Efforts are being made to coordinate these three in order to ensure that the population is provided with continuous and complete service. This will make it possible to serve the underprivileged population in the north and south of the country and in the shantytowns surrounding the large cities. A strong public sector is expected to be set up, based on a regionalized system, with centralization of direction, organization, standardization and planning and decentralization of execution. In four northern provinces, support continues to be given in connection with provincial planning, which unites all the executive services.

Medical care accounts for 80% of the health outlays. The emphasis being placed on the efficient management of these expenditures will make it possible to extend the coverage and improve the quality of the service. It is the aim of the technical co-

operation projects Administration of Public Health Services and Medical Care to promote those activities. The Government has set as an important objective the unification, improvement and expansion of public health laboratory services which includes those of the Microbiological, Pharmacological, Nutrition and Zoonosis Institutes and others. To that end, an external financing project is being prepared and will make it possible to obtain the physical facilities, equipment and human resources needed for achieving that purpose. Physical rehabilitation activities are being carried out, primarily in prosthetic and orthotic workshops and in personnel training.

The Instituto Nacional de Estadísticas delegated to the Secretaría de Estado de Salud Pública the achievement of the health goals. A health plan requires an efficient information system, which is also basic for decision-making at the national level. Its importance calls for increased efforts in this regard.

A plan for the development of manpower at all levels is being executed and steps are being taken to ensure the participation of training institutions. The manpower inventory which it is expected to update by 1977 will determine the extent to which the needs for multidisciplinary personnel for public health activities are met. By means of the new procedures for student selection established by the new educational law, efforts are being made to correct the imbalances in admission to different professional training courses in the health sciences. 45.43% of the budget of the Secretaría de Estado de Salud Pública is for hospital care activities. Various faculties in the health area continue to take part in the Medical and Nursing Textbook Program. An agreement has been signed for the establishment of a Biomedical Information and Documentation Network, and programs of continuing education for health professionals are being expanded.

The 1976 budget of the Secretaría de Estado de Salud Pública represented 2.7% of the total national budget.

ARGENTINA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	394,960	64.3	409,665	62.1	454,750	62.3
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	155,580	25.4	150,495	22.8	211,220	28.9
-----	-----	-----	-----	-----	-----	-----
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	30,090	4.9	29,045	4.4	42,140	5.8
0200 MALARIA	8,470	1.4	9,735	1.5	2,000	.3
0400 TUBERCULOSIS	11,010	1.8	12,655	1.9	18,520	2.5
0800 PARASITIC DISEASES	12,310	2.0	18,655	2.8	16,120	2.2
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	32,250	5.3	30,275	4.6	51,780	7.1
1400 NUTRITION	11,170	1.8	15,235	2.3	25,740	3.5
1500 MENTAL HEALTH	20,150	3.3	15,275	2.3	24,760	3.4
1600 DENTAL HEALTH	21,120	3.4	15,620	2.4	17,640	2.4
1700 CHRONIC DISEASES	9,010	1.5	4,000	.6	12,520	1.7
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ENVIRONMENTAL HEALTH SERVICES	130,560	21.2	130,055	19.7	143,490	19.7
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	66,155	10.7	71,915	10.9	83,905	11.5
3200 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3200 FOOT-AND-MOUTH DISEASE	41,475	6.8	43,675	6.6	45,905	6.3
3700 PREVENTION OF ACCIDENTS	22,930	3.7	14,465	2.2	13,680	1.9
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COMPLEMENTARY SERVICES	108,820	17.7	129,115	19.6	100,040	13.7
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4100 NURSING	12,240	2.0	15,620	2.4	19,240	2.6
4200 LABORATORIES	36,395	5.9	53,165	8.1	56,280	7.7
4500 REHABILITATION	60,185	9.8	60,330	9.1	24,520	3.4
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II. DEVELOPMENT OF THE INFRASTRUCTURE	219,160	35.7	249,940	37.9	274,815	37.7
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	164,960	26.9	179,575	27.2	193,820	26.6
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	33,135	5.4	65,600	9.9	89,640	12.4
5100 GENERAL PUBLIC HEALTH SYSTEMS	17,100	2.8	7,000	1.1	11,800	1.6
5200 MEDICAL CARE SYSTEMS	2,310	.4	14,735	2.2	24,400	3.3
5300 PLANNING	22,700	3.7	5,000	.8	6,060	.8
5400 STATISTICS AND INFORMATION SYSTEMS	77,085	12.5	72,275	10.9	45,740	6.3
5500 MANAGEMENT SYSTEMS	12,630	2.1	14,965	2.3	16,180	2.2
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DEVELOPMENT OF HUMAN RESOURCES	41,830	6.8	52,745	8.0	61,355	8.4
-----	-----	-----	-----	-----	-----	-----
6100 PUBLIC HEALTH	11,930	1.9	14,965	2.3	17,240	2.4
6200 MEDICINE	18,140	3.0	24,620	3.7	27,040	3.7
6400 ENVIRONMENTAL SCIENCES	11,760	1.9	13,160	2.0	17,075	2.3
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TECHNOLOGICAL RESOURCES	12,370	2.0	17,620	2.7	19,640	2.7
-----	-----	-----	-----	-----	-----	-----
8500 REGIONAL LIBRARIES	12,370	2.0	17,620	2.7	19,640	2.7
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GRAND TOTAL	614,120	100.0	659,605	100.0	729,565	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

ARGENTINA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA VI CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA VI (PR)	<u>Program Planning and General Activities</u>			90	48,050	90	50,945	90	53,945
	Area Representative	0.0310	D-1						
AMRO-1360 (PR)	<u>Maternal and Child Health and Family Welfare</u>			103	11,315	103	16,845	103	17,880
	Medical Officer	0.2117	P-5						
AMRO-4160 (PR)	<u>Nursing</u>			100	7,780	100	12,215	100	12,990
	Nurse	0.0895	P-4						
AMRO-4360 (WR)	<u>Epidemiological Surveillance</u>			85	7,280	85	10,560	85	11,185
	Epidemiologist	4.0846	P-4						
AMRO-5360 (PR)	<u>Health Systems - Planning</u>			88	14,070	88	14,880	88	15,765
	Health Planner	0.0915	P-5						
AMRO-5460 (PR)	<u>Statistics and Information Systems</u>			103	8,710	103	12,750	103	13,600
	Statistician	0.4853	P-3						
AMRO-5560 (PR)	<u>Management Systems</u>			103	13,765	103	14,575	103	15,470
	Administrative Methods Officer	0.4590	P-4						
AMRO-6260 (WR)	<u>Development of Human Resources - Medicine</u>			103	7,020	103	10,870	103	11,460
	Medical Educator	4.3685	P-5						
	<u>Total All Programs</u>			775	117,990	775	143,640	775	152,295

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ARGENTINA - DETAIL

ARGENTINA-0100, COMMUNICABLE DISEASE CONTROL

This project includes polio, measles, DPT and smallpox immunization campaigns as well as epidemiological surveillance programs for smallpox, yellow fever, cholera, influenza, meningococcal meningitis, polio, rabies, encephalitis, diphtheria, whooping cough, measles, tetanus and infectious hepatitis. Special attention is given to those diseases showing a potential risk of epidemics, such as meningococcal meningitis and influenza, as well as those showing a tendency to increase or stabilize, such as venereal diseases and leprosy.

TOTAL		-	-	2	TOTAL	WR	30,090	29,045	42,140
CONSULTANT MONTHS	WR	-	-	2	PERSONNEL-CONSULTANTS		-	-	6,800
TOTAL		17	17	17	SEMINAR COSTS		-	2,000	3,000
FELLOWSHIP MONTHS	WR	17	17	17	SUPPLIES AND EQUIPMENT		17,000	12,000	15,000
					FELLOWSHIPS		13,090	15,045	17,340

ARGENTINA-0200, MALARIA ERADICATION

Malaria incidence is maintained at a low level following control measures taken in the foci of activity detected between 1970 and 1973. Control activities continue with spraying and medication, in coordination with actions taken by bordering countries, and it is hoped that malaria can be completely eradicated in the near future.

TOTAL		11	11	-	TOTAL	WR	8,470	9,735	2,000
FELLOWSHIP MONTHS	WR	11	11	-	SUPPLIES AND EQUIPMENT		-	-	2,000
					FELLOWSHIPS		8,470	9,735	-

ARGENTINA-0400, TUBERCULOSIS CONTROL

Morbidity and mortality from tuberculosis are slowly being reduced, the latter being less than 9 per 100,000 inhabitants, with marked variations between the Federal Capital (5 per 100,000) and some northern provinces (70 per 100,000).

The agreement signed with PAHO/WHO provides for collaboration in a pilot control plan in Santa Fe province based on the integration of health service activities, research into sources of infection through sputum examinations, and treatment, preferably on an outpatient basis.

TOTAL		1	-	1	TOTAL	WR	11,010	12,655	18,520
CONSULTANT MONTHS	WR	1	-	1	PERSONNEL-CONSULTANTS		2,700	-	3,400
TOTAL		3	3	6	SEMINAR COSTS		3,000	5,000	4,000
FELLOWSHIP MONTHS	WR	3	3	6	SUPPLIES AND EQUIPMENT		3,000	5,000	5,000
					FELLOWSHIPS		2,310	2,655	6,120

ARGENTINA-0800, CHAGAS' DISEASE AND HEMORRHAGIC FEVER

Chagas' disease is one of this country's most serious epidemiological problems, especially in the northern provinces. Argentinean hemorrhagic fever is a highly lethal virosis which is so far limited to the provinces of Buenos Aires, La Pampa and Cordoba with increasing incidence. PAHO/WHO collaborates in research designed to clarify several etiopathogenic aspects, modes of transmittal, and reservoirs of both diseases.

TOTAL		-	2	-	TOTAL	WR	12,310	18,655	16,120
CONSULTANT MONTHS	WR	-	2	-	PERSONNEL-CONSULTANTS		-	6,000	-
TOTAL		3	3	6	SUPPLIES AND EQUIPMENT		10,000	10,000	10,000
FELLOWSHIP MONTHS	WR	3	3	6	FELLOWSHIPS		2,310	2,655	6,120

ARGENTINA-1301, MATERNAL AND CHILD HEALTH

The purpose of this project is to cooperate with the Government in extending the coverage of maternal and child health services, in improving health care standards, in establishing regional systems of training and health care, and in training personnel.

TOTAL		1	1	3	TOTAL	WR	32,250	30,275	51,780
CONSULTANT MONTHS	WR	1	1	3	PERSONNEL-CONSULTANTS		2,700	3,000	10,200
TOTAL		15	15	29	SEMINAR COSTS		12,000	8,000	8,000
FELLOWSHIP MONTHS	WR	15	15	29	SUPPLIES AND EQUIPMENT		6,000	6,000	4,000
					FELLOWSHIPS		11,550	13,275	29,580

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ARGENTINA-1400, NUTRITION STUDIES

The Government plans to complete a region-by-region diagnosis of the country's nutritional status as part of the formulation of a national food and nutrition policy. This task has been assigned to an interministerial committee formed by the Ministries of Social Welfare and of Economy, with the noteworthy participation of the Secretariats of Agriculture and Public Health.

The purpose of this project is to facilitate achievement of this goal, as well as to strengthen personnel training efforts by providing fellowships for study abroad and providing support for undergraduate and graduate education. The National Nutrition Institute was created under the Secretariat of State of Public Health.

TOTAL		1	1	1	TOTAL	PR	11,170	15,235	25,740
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		-	-	3,000
TOTAL		11	11	17	SUPPLIES AND EQUIPMENT		-	2,500	2,000
-----		-----	-----	-----	FELLOWSHIPS		8,470	9,735	17,340
FELLOWSHIP MONTHS	PR	11	11	17					

ARGENTINA-1500, MENTAL HEALTH

The purposes of this project are to collaborate in discovering the exact magnitude of the problem and in formulating a national mental health policy; to improve the state of psychiatric care, in both preventive and curative aspects; and to train personnel for the achievement of these objectives.

TOTAL		2	-	1	TOTAL	WR	20,150	15,275	24,760
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	2	-	1	PERSONNEL-CONSULTANTS		5,400	-	3,400
					SEMINAR COSTS		-	-	3,000
TOTAL		15	15	18	SUPPLIES AND EQUIPMENT		3,200	2,000	-
-----		-----	-----	-----	FELLOWSHIPS		11,550	13,275	18,360
FELLOWSHIP MONTHS	WR	15	15	18					

ARGENTINA-1600, DENTAL HEALTH

The objective of this project is to collaborate in obtaining better epidemiological knowledge of dental problems, in fulfilling the goals of service coverage, in extending fluoridation programs, in revising standards, in establishing quality control systems for dental materials, and in training personnel in the country and abroad.

TOTAL		5	1	1	TOTAL	WR	21,120	15,620	17,640
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	5	1	1	PERSONNEL-CONSULTANTS		13,500	3,000	3,400
					SEMINAR COSTS		3,000	2,000	2,000
TOTAL		6	12	12	FELLOWSHIPS		4,620	10,620	12,240
-----		-----	-----	-----					
FELLOWSHIP MONTHS	WR	6	12	12					

ARGENTINA-1700, CHRONIC DISEASES

Increased life expectancy has brought about an increase in the percentage of deaths caused by chronic diseases. Through this project PAHO/WHO collaborates in epidemiological research programs and other aspects pertaining to control measures. Special emphasis will be placed on cancer, cardiovascular diseases and rheumatism.

TOTAL		1	-	1	TOTAL	WR	9,010	4,000	12,520
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	1	-	1	PERSONNEL-CONSULTANTS		2,700	-	3,400
					SEMINAR COSTS		3,000	3,000	-
TOTAL		3	-	6	SUPPLIES AND EQUIPMENT		1,000	1,000	3,000
-----		-----	-----	-----	FELLOWSHIPS		2,310	-	6,120
FELLOWSHIP MONTHS	WR	3	-	6					

ARGENTINA-2000, ENVIRONMENTAL SANITATION

The objective of this project is to cooperate in defining problems related to environmental health, the establishment of national environmental health policies, and the attention given to such problems. This includes principally the study and development of plans for provision of services for: potable water; disposal of sewage and excreta; improvement of rural housing; food hygiene, occupational safety and health; garbage; control of radioactive materials; and prevention and control of water, air and soil pollution. The project will be guided by the formulation of national and regional plans, the utilization of the most appropriate technology, institutional development, access to financial resources, and improvement of human resources.

TOTAL		12	12	12	TOTAL	PR	66,155	71,915	83,905
-----		-----	-----	-----	-----	-----	-----	-----	-----
P-4 SANITARY ENGINEER .320E	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					DUTY TRAVEL		2,000	2,000	2,000
TOTAL		1	1	1	SEMINAR COSTS		500	1,000	1,000
-----		-----	-----	-----	SUPPLIES AND EQUIPMENT		3,000	3,000	3,000
CONSULTANT MONTHS	PR	1	1	1	FELLOWSHIPS		18,480	21,240	30,600
TOTAL		24	24	30					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	24	24	30					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

ARGENTINA-3200, FOOT-AND-MOUTH DISEASE CONTROL

Argentina was the first South American country to start a national program for the combat of foot-and-mouth disease, in 1961. Due to internal political and administrative difficulties, the campaign did not control the disease significantly. The epidemiological situation represents a constant risk for the Region. Argentina is a key country for the control and eradication of foot-and-mouth disease on the Continent. The Government has recently expressed its willingness to reorganize an effective program, with the active participation of farmers' organizations and with the technical assistance of PANAFOTSA. Already the Center has started collaborative work on research and a pilot trial.

TOTAL		12	12	12	TOTAL	PR	41,475	43,675	45,905
P-4 COUNTRY CONSULTANT .3229	PR	12	12	12	PERSONNEL-POSTS DUTY TRAVEL		39,475 2,000	41,675 2,000	43,905 2,000

ARGENTINA-3700, TRAFFIC ACCIDENTS

The purpose of this project is to promote measures controlling traffic accidents, especially those dealing with accident research, driver education, legislation, traffic engineering, licensing of drivers, safety requirements for the manufacture of vehicles, insurance, emergency medical aid, and rehabilitation of accident victims.

TOTAL		9	9	9	TOTAL	PR	22,930	14,465	13,680
FELLOWSHIP MONTHS	PR	9	9	9	SEMINAR COSTS SUPPLIES AND EQUIPMENT FELLOWSHIPS		12,000 4,000 6,930	4,500 2,000 7,965	4,500 - 9,180

ARGENTINA-4100, NURSING SERVICES

The purpose of this project is to cooperate in improving nursing services, reorganizing their central units, delimiting spheres of action, defining working methods, and training personnel in different areas.

TOTAL		12	12	12	TOTAL	PR	12,240	15,620	15,240
FELLOWSHIP MONTHS	PR	12	12	12	SEMINAR COSTS SUPPLIES AND EQUIPMENT FELLOWSHIPS		- 3,000 9,240	3,000 2,000 10,620	5,000 2,000 12,240

ARGENTINA-4200, LABORATORY SERVICES

The purposes of this project are to promote the establishment of a national laboratory system within the health plan of the country, to establish regulations for standardizing equipment and techniques; to train personnel; to extend coverage; to make better use of resources; to institute quality control; and to coordinate public health laboratories with those of hospital services.

TOTAL		12	12	12	TOTAL	WR	36,395	53,165	56,280
P-4 LABORATORY ADVISER 4.4825	WR	12	12	12	PERSONNEL-POSTS PERSONNEL-CONSULTANTS DUTY TRAVEL SUPPLIES AND EQUIPMENT FELLOWSHIPS		22,665 2,700 1,000 3,100 6,930	35,700 3,000 1,500 5,000 7,965	37,200 3,400 1,500 5,000 9,180
TOTAL		1	1	1					
CONSULTANT MONTHS	WR	1	1	1					
TOTAL		9	9	9					
FELLOWSHIP MONTHS	WR	9	9	9					

ARGENTINA-4500, REHABILITATION

The purposes of this project are to improve the country's rehabilitation services; to increase, both quantitatively and qualitatively, the production of prostheses and orthoses in order to meet the national demand; and to cooperate in the training of specialized personnel at the levels currently provided in existing institutions.

TOTAL		12	12	-	TOTAL	PR	60,185	60,330	24,520
P-4 PROSTHETICS TECHNICIAN .4446	PR	12	12	-	PERSONNEL-POSTS PERSONNEL-CONSULTANTS DUTY TRAVEL SUPPLIES AND EQUIPMENT FELLOWSHIPS		39,475 2,700 1,000 14,700 2,310	41,675 - 1,000 15,000 2,655	- 3,400 - 15,000 6,120
TOTAL		1	-	1					
CONSULTANT MONTHS	PR	1	-	1					
TOTAL		3	3	6					
FELLOWSHIP MONTHS	PR	3	3	6					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ARGENTINA-5000, HEALTH SERVICES

The purpose of this project is to contribute to the organization and development of a national health system through the progressive modification and extension of the public sector and the incorporation of social security systems to provide the entire population with adequate services at various levels, by cooperating with the national health plan and by encouraging the establishment of general regulations for agencies in this sector.

TOTAL		12	24	24	TOTAL	WR	24,665	55,865	67,200
-----		-----	-----	-----	-----		-----	-----	-----
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		22,665	53,165	64,500
4.2015					DUTY TRAVEL		2,000	2,700	2,700
P-1 ADMINISTRATIVE OFFICER	WR	-	12	12					
4.4708									

ARGENTINA-5100, DEVELOPMENT OF HEALTH SERVICES

This project is intended to organize and promote health services to provide efficient, economical, timely and permanent high quality care to the entire population by means of a formally defined health policy, the preparation of a national health plan, and the organization of an efficient system which includes the best efforts of agents of the health sector and the training of human resources entering the health services.

TOTAL		-	-	2	TOTAL	WR	25,570	16,735	34,240
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	WR	-	-	2	PERSONNEL-CONSULTANTS		-	-	6,800
					SEMINAR COSTS		11,000	2,000	2,000
TOTAL		11	11	22	SUPPLIES AND EQUIPMENT		6,100	5,000	3,000
-----		-----	-----	-----	FELLOWSHIPS		8,470	9,735	22,440
FELLOWSHIP MONTHS	WR	11	11	22					

ARGENTINA-5201, MEDICAL CARE

The Government plans to provide a substitute for the Latin American Center for Medical Administration closed in January 1977 through a national project to continue the activities initiated by the Center, adapting them to current requirements, and extending them to study the national health care situation with a view to organizing a system for rationalizing the use of existing resources.

TOTAL		3	11	20	TOTAL		2,310	14,735	24,400
-----		-----	-----	-----	-----		-----	-----	-----
FELLOWSHIP MONTHS	PR	-	-	20	SUBTOTAL	PR	-	-	24,400
FELLOWSHIP MONTHS	WR	3	11	-					
					SEMINAR COSTS		-	-	4,000
					FELLOWSHIPS		-	-	20,400
					SUBTOTAL	WR	2,310	14,735	-
					-----		-----	-----	-----
					SEMINAR COSTS		-	5,000	-
					FELLOWSHIPS		2,310	9,735	-

ARGENTINA-5300, HEALTH PLANNING

This project cooperates in promoting the development of a health planning process, to be furthered by the organization of a national planning and coordination division which should formulate a national health plan. To this end, complementary training of personnel will be carried out at different levels.

TOTAL		1	-	-	TOTAL	WR	22,700	5,000	6,060
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	WR	1	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
					SEMINAR COSTS		9,000	5,000	3,000
TOTAL		-	-	3	FELLOWSHIPS		-	-	3,060
-----		-----	-----	-----	COURSE COSTS		11,000	-	-
FELLOWSHIP MONTHS	WR	-	-	3					

ARGENTINA-5400, HEALTH STATISTICS

The purposes of this project are to expand coverage and improve the quality of statistical information provided by local statistics services and medical records and to redesign programs for the development of human resources according to the country's needs.

TOTAL		12	12	-	TOTAL	PR	77,085	72,275	45,740
-----		-----	-----	-----	-----		-----	-----	-----
P-3 MEDICAL RECORDS LIBRARIAN	PR	12	12	-	PERSONNEL-POSTS		33,615	35,540	-
.3612					PERSONNEL-CONSULTANTS		-	-	3,400
					DUTY TRAVEL		2,000	2,000	-
TOTAL		-	-	1	FELLOWSHIPS		8,470	9,735	17,340
-----		-----	-----	-----	COURSE COSTS		33,000	25,000	25,000
CONSULTANT MONTHS	PR	-	-	1					
TOTAL		11	11	17					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	11	11	17					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ARGENTINA-5500, MANAGEMENT OF HEALTH SERVICES

This project aids in the promotion, orientation, coordination and supervision of activities developed for the improvement of health services administrative systems, methods and procedures.

The reforms or changes introduced in the different administrative units provide support and help to strengthen the infrastructure of health institutions. With the improvement and increased efficiency of these services, the reforms become part of the philosophy and the process of creating indispensable tools for overall improvement of a public administration capable of serving the country's development processes.

TOTAL		1	-	-	TOTAL	PR	12,630	14,965	16,180
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	PR	1	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
					SEMINAR COSTS		2,000	3,000	3,000
TOTAL		9	9	9	SUPPLIES AND EQUIPMENT		1,000	4,000	4,000
-----		-----	-----	-----	FELLOWSHIPS		6,930	7,965	9,180
FELLOWSHIP MONTHS	PR	9	9	9					

ARGENTINA-6100, SCHOOL OF PUBLIC HEALTH

The main goals of this project are to cooperate with the country's schools of public health in the training and education of university students and technicians in different health disciplines; to promote research; to contribute to improving teaching methods of educational personnel; to develop continuing education programs and to promote a close relationship between the institutions and the country's health service. Education at all levels must be increased in order to meet the increasingly specialized demand and the urgent need to solve new and complex sanitary problems.

TOTAL		9	9	12	TOTAL	WR	11,930	14,965	17,240
-----		-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	WR	9	9	12	SEMINAR COSTS		5,000	5,000	5,000
					SUPPLIES AND EQUIPMENT		-	2,000	-
					FELLOWSHIPS		6,930	7,965	12,240

ARGENTINA-6200, EDUCATION IN HEALTH SCIENCES

The main purposes of this project are to cooperate with the faculties and schools of health sciences in revising their current curricula; to promote the use of modern teaching methods; to provide teachers with better training in pedagogy and curriculum planning; to further the development of special areas of education such as social medicine; and to encourage greater academic and administrative integration with a multidisciplinary and multiprofessional educational approach.

TOTAL		2	2	2	TOTAL	WR	18,140	24,620	27,040
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SEMINAR COSTS		2,500	5,000	5,000
TOTAL		12	12	12	SUPPLIES AND EQUIPMENT		1,000	3,000	3,000
-----		-----	-----	-----	FELLOWSHIPS		9,240	10,620	12,240
FELLOWSHIP MONTHS	WR	12	12	12					

ARGENTINA-6400, SANITARY ENGINEERING EDUCATION

The purposes of this project are to collaborate with universities and official agencies (national, provincial and local) in providing undergraduate and postgraduate education in sanitary engineering and environmental sanitation for professional, technical and operational personnel; to encourage and organize applied research; and to promote, on a regular basis, widespread and programmed dissemination and expert delivery of information to all interested parties in the country.

To this end, work is currently underway with the University of Buenos Aires and nine other universities in several provinces as well as cooperation with Obras Sanitarias de la Nación, Servicio Nacional de Agua Potable y Saneamiento Rural and with the Dirección Nacional de Saneamiento Ambiental in developing specialized areas of research and in providing assistance for the consolidation of the Argentine Information and Reference Center for Sanitary Engineering and Environmental Sciences.

TOTAL		1	1	1	TOTAL	PR	11,760	13,160	17,075
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		2,750	3,005	5,615
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
-----		-----	-----	-----	COURSE COSTS		4,000	4,500	5,000
FELLOWSHIP MONTHS	PR	3	3	3					

ARGENTINA-8500, NATIONAL NETWORK OF INFORMATION IN HEALTH SCIENCES

The basic purpose of this project is to cooperate in the organization and maintenance of a national network of information and documentation on the country's medical and health sciences to ensure rapid transmittal of information and to further its active integration into the health services and teaching and research institutions. The network will serve as coordinator for existing medical and related sciences libraries and will include a national network of information and documentation. It will form part of the Pan American network of information and documentation on the Health Sciences through BIREME, and will maintain a close relationship with the bibliographic centers of other countries, especially those in the South Cone of Latin America.

	FUND	1977	1978	1979
	----	----	----	----
TOTAL		-	1	1
		----	----	----
CONSULTANT MONTHS	WR	-	1	1
TOTAL		6	12	12
		----	----	----
FELLOWSHIP MONTHS	PR	-	-	12
FELLOWSHIP MONTHS	WR	6	12	-

	FUND	1977	1978	1979
	----	-----	-----	-----
		\$	\$	\$
TOTAL		12,370	17,620	15,640
		-----	-----	-----
SUBTOTAL	PR	-	-	12,240
		-----	-----	-----
FELLOWSHIPS		-	-	12,240
SUBTOTAL	WR	12,370	17,620	7,400
		-----	-----	-----
PERSONNEL-CONSULTANTS		-	3,000	2,400
SEMINAR COSTS		1,250	2,000	2,000
SUPPLIES AND EQUIPMENT		6,500	2,000	2,000
FELLOWSHIPS		4,620	10,620	-

BAHAMAS

The Bahamas, a former British Colony which achieved independence on 10 July 1973, has a population estimated at 197,000 (mid-1974), and consists of over 700 islands, cays, and rocks (5,382 square miles). Only 15 have significant number of inhabitants. The main concentration of population is on the island of New Providence, which has a population estimated at 105,000 inhabitants. Sixty per cent of the population is under 25 years of age, with a natural annual increase of 1.76% (1974). The birth rate (1974) was 22.9 per 1,000 population, the death rate was 4.6; the infant death rate was 26.7 per 1,000 live births, the neonatal death rate 19.1, and the maternal mortality rate 0.9 per 1,000 live births. In 1972 the principal causes of death were: 1) diseases of the heart; 2) accidents; 3) cerebrovascular diseases; 4) malignant neoplasms; and 5) influenza and pneumonia.

The total health expenditure by the Ministry of Health in 1974 was US\$16 million, which was 14% of the national budget and represented a per capita expenditure of US\$82. The per capita income is US\$2,300. Tourism is a very important factor in the economic life of the country and has shown a steady growth, with over 1.5 million visitors in 1974.

Health coverage will be extended by improved basic services, including immunization in the Family Islands and further development of hospitals in New Providence and Grand Bahamas as central medical care resources. Dental services, largely confined to New Providence, are being extended, and the use of auxiliaries is being considered.

Management of the environment is a priority activity for the Bahamas. Tourism, the major industry, requires a clean environment. Considerable industrialization has already taken place on Grand Bahamas, where an oil refinery and a cement factory are in operation. A new transshipment terminal will soon go into operation. The Department of Environmental Health Services was created to cope with new problems arising from urbanization and industrialization. New programs in water and air pollution are being developed. A complete study in solid waste management was conducted in 1975, and a project will be implemented during 1976-1977. As a part of the expansion of the local livestock industry, animal health and veterinary public health services will be developed.

Studies are being undertaken on nursing services, including those presently provided in the Family Islands, as the basis for the optimum utilization of the staff and determination of levels of necessary preparation and facilities. Community education is being intensified, with particular emphasis on drug abuse, alcoholism and family life education. Studies of hypertension and epilepsy were conducted during 1974-1975. Laboratory services at Princess Margaret Hospital are being expanded and consideration is being given to the needs of veterinary medicine, environmental health and epidemiological surveillance.

As a part of the reorganization of the Health Ministry, new divisions for personal health services and environmental health services are being implemented. Personal health services will be provided through a health complex centered on existing hospitals: Princess Margaret Hospital (454 beds), Sandilands Rehabilitation Center, combining psychiatric (210 beds) and geriatric (150 beds), a leprosarium (11 beds), and the Rand Memorial Hospital (50 beds) on Grand Bahamas.

The headquarters of the Health Ministry is being reorganized to equip it to undertake responsibility for program formulation and auditing, and the executive level has been strengthened by the establishment of the posts of Director of Personal Health Services and Director of Environmental Health. Recommendations for the development of a hospital statistics system (as a first step toward the development of a national health information and statistical system) were accepted by the Government, and the post of medical statistician was established, together with clerical staff. A hospital statistics coding manual was developed, and coders were trained for purposes of statistical, monitoring and data transmission to computers. Arrangements have been made to feed data collected from new hospital face sheets to a central computer.

The budgeting and accounting systems of the hospitals are being modernized. A central supply system has been developed, and laundry, food and maintenance services are being upgraded to meet the needs of the health complex. Three hospital administrators have completed training overseas, and local training courses are being held for other management personnel.

The Government, recognizing the need for a rapid expansion of capacity to produce health personnel for the extension and implementation of services, intends to establish a school of health science which will absorb the present School of Nursing (basic and postbasic) and provide, in addition, new courses for public health inspectors and laboratory technicians, and basic training for radiographers. A continued education course for environmental health personnel was held in 1976 with 24 participants.

Draft legislation has been prepared for a general hospital enabling act, as well as legislation for the operation of the Rand Memorial and Princess Margaret Hospitals.

BAHAMAS
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	16,810	12.0	25,890	31.2	34,140	23.8
ENVIRONMENTAL HEALTH SERVICES -----	9,100	6.5	17,235	20.8	19,520	13.6
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES -----	9,100	6.5	17,235	20.8	19,520	13.6
COMPLEMENTARY SERVICES -----	7,710	5.5	8,655	10.4	14,620	10.2
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	122,245	88.0	56,950	68.8	109,150	76.2
HEALTH SYSTEMS -----	122,245	88.0	56,950	68.8	109,150	76.2
5100 GENERAL PUBLIC HEALTH SYSTEMS -----	14,040	10.1	14,695	17.7	56,830	39.7
5200 MEDICAL CARE SYSTEMS -----	75,880	54.7	-	-	8,460	4.5
5500 MANAGEMENT SYSTEMS -----	32,325	23.2	42,255	51.1	45,860	32.0
GRAND TOTAL =====	139,055	100.0	82,840	100.0	143,290	100.0

*LESS THAN .05 PERCENT

BAHAMAS
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
1977	\$				\$		\$		\$	\$	\$	\$
PAHO---PR	16,810	-	-	5	13,500	-	3	2,310	-	1,000	-	-
WHO---WR	46,365	12	-	3	28,765	3,500	10	7,700	3,150	3,250	-	-
UNDP	75,880	12	-	9	68,620	-	9	7,260	-	-	-	-
TOTAL	139,055	24	-	17	110,885	3,500	22	17,270	3,150	4,250	-	-
PCT. OF TOTAL	100.0				79.8	2.5		12.4	2.3	3.0	-	-
1978												
PAHO---PR	25,890	-	-	4	12,000	-	14	12,390	-	1,500	-	-
WHO---WR	56,950	12	-	3	42,100	3,500	10	8,850	-	2,500	-	-
TOTAL	82,840	12	-	7	54,100	3,500	24	21,240	-	4,000	-	-
PCT. OF TOTAL	100.0				65.3	4.2		25.7	-	4.8	-	-
1979												
PAHO---PR	97,430	12	-	4	47,400	1,000	45	45,900	-	3,130	-	-
WHO---WR	45,860	12	-	1	38,800	4,000	3	3,060	-	-	-	-
TOTAL	143,290	24	-	5	86,200	5,000	48	48,960	-	3,130	-	-
PCT. OF TOTAL	100.0				60.2	3.5		34.1	-	2.2	-	-

PAHO-PR-REGULAR BUDGET
 PN-COMMUNITY WATER SUPPLY
 PA-INCAP - REGULAR BUDGET
 PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
 PG-GRANTS AND OTHER CONTRIBUTIONS
 PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
 PJ-GRANTS RELATED TO CAREC
 WHO--WR-REGULAR BUDGET
 UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
 UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
 WQ-GRANTS AND OTHER FUNDS

BAHAMAS
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			136	17,955	136	20,800	136	22,260
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			19	2,815	19	3,035	19	3,270
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			21	2,600	21	2,785	21	2,965
	Health Planner	0.4034	P-4						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			114	32,685	108	25,000	108	25,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	Total All Programs			323	75,655	317	75,100	317	78,315
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BAHAMAS - DETAIL

BAHAMAS-2000, ENVIRONMENTAL SERVICES

The Bahamas is faced with the basic problem of lack of proper infrastructure and human resources for general management of the environment and delivery of adequate environmental services. The Environmental Service Department is responsible for the protection of the environment against the adverse effects of pollution as well as for providing collection and disposal of solid waste. The scarcity of water, the lack of sewerage, combined with the requirements of the tourist industry, make it essential for the Department to consider rational and sound bases for the fulfillment of its duty. This project focuses on the following aspects: development of adequate legislation and regulations for proper control of the environment; improvement of solid waste management; development of the Environmental Service Department; and improvement and development of human resources.

TOTAL		3	2	2	TOTAL	PR	9,100	17,235	15,520
CONSULTANT MONTHS	PR	3	2	2	PERSONNEL-CONSULTANTS		8,100	6,000	6,800
TOTAL		-	11	11	SUPPLIES AND EQUIPMENT		1,000	1,500	1,500
FELLOWSHIP MONTHS	PR	-	11	11	FELLOWSHIPS		-	9,735	11,220

BAHAMAS-4100, NURSING SERVICES

The overall objective of this project is to strengthen the delivery of health services through the improvement of nursing practices. This will be accomplished through redefining functions of nursing personnel and establishing a system of nursing; developing education programs to meet the needs of the community and staff; and setting norms and implementing standards of patient care.

TOTAL		2	2	1	TOTAL	PR	7,710	8,655	14,620
CONSULTANT MONTHS	PR	2	2	1	PERSONNEL-CONSULTANTS		5,400	6,000	3,400
TOTAL		3	3	11	FELLOWSHIPS		2,310	2,655	11,220
FELLOWSHIP MONTHS	PR	3	3	11					

BAHAMAS-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose and objectives of this project are: to develop the health planning process in the country in order to rationalize the use of existing resources, special emphasis being placed on the extension of coverage through coordinated primary health care units; to develop health manpower with major emphasis on local capacity to train staff through a school of allied health sciences; to develop in the Ministry of Health and Education a school of health education programs; to strengthen the epidemiological surveillance system including the increased capacity of laboratory services; to study measures for improving the health of mothers and children and to explore possibilities for introduction of family planning for improvement of the quality of total life; to prepare a national dental health program for settled areas of the Bahamas; to prepare and implement a comprehensive preventive and curative program for chronic diseases common in the community (mental disorders, diabetes, alcoholism and drug abuse); to strengthen the health information system; and to develop a more effective method for health education of the public, and to secure community support and cooperation in all community health efforts.

TOTAL		-	-	12	TOTAL		14,040	14,655	56,830
P-4 MEDICAL OFFICER 4832	PR	-	-	12	SUBTOTAL	PR	-	-	56,830
TOTAL		2	2	-	PERSONNEL-POSTS		-	-	33,800
CONSULTANT MONTHS	WR	2	2	-	DUTY TRAVEL		-	-	1,000
TOTAL		7	7	20	SUPPLIES AND EQUIPMENT		-	-	1,630
FELLOWSHIP MONTHS	PR	-	-	20	FELLOWSHIPS		-	-	20,400
FELLOWSHIP MONTHS	WR	7	7	-	SUBTOTAL	WR	14,040	14,695	-
					PERSONNEL-CONSULTANTS		5,400	6,000	-
					SUPPLIES AND EQUIPMENT		3,250	2,500	-
					FELLOWSHIPS		5,390	6,195	-

BAHAMAS-5200, HOSPITAL ADMINISTRATION

The objectives of this project are to assist the Government in the reorganization of the Princess Margaret Hospital, Sandilands Rehabilitation Centre and Rand Memorial Hospital, to function as the nucleus of a community-oriented integrated personal health service; to develop systems of management for the operation of the hospitals including the development of system procedures, forms and legislation; to continue assistance in strengthening administrative services including budgeting and accounting, supply management and personnel management; to continue assistance in the development of a self-contained health facilities maintenance program with emphasis on preventive maintenance; to develop an effective health information system to allow planning, programming and monitoring of activities by the Ministry planners and managers; and to assist in the development of human resources through local and overseas training.

	FUND	1977	1978	1979		FUND	1977	1978	1979
							\$	\$	\$
TOTAL		12	-	-	TOTAL		75,880	-	6,460
P-4 HOSPITAL ADMINISTRATOR 4.4013	UNDP	12	-	-	SUBTOTAL	PR	-	-	6,460
TOTAL		9	-	1	PERSONNEL-CONSULTANTS FELLOWSHIPS		-	-	3,400 3,060
CONSULTANT MONTHS	PR	-	-	1	SUBTOTAL	UNDP	75,880	-	-
CONSULTANT MONTHS	UNDP	9	-	-	PERSONNEL-POSTS		37,120	-	-
TOTAL		9	-	3	PERSONNEL-CONSULTANTS FELLOWSHIPS		31,500 7,260	-	-
FELLOWSHIP MONTHS	PR	-	-	3					
FELLOWSHIP MONTHS	UNDP	9	-	-					

BARBADOS

Barbados is a small tropical island in the Eastern Caribbean with temperatures ranging from 75°F from November to February to 85°F from July to November. There are two seasons, a dry season from January to June and a rainy or wet season from July to December. The annual rainfall varies from 45" in low-lying areas to 80" in the elevated areas.

The country had a population estimated at 243,800 in 1975 with a population density of approximately 1,466 per square mile. There is only one large town in the country, Bridgetown, which, including its metropolitan area, has a population of 94,000. There are 11 parishes but they do not have the status of local government, and the entire country is controlled by the Central Government.

Telecommunications are excellent and there is a first-class network of roads, so there are no isolated rural areas. The entire population lives in urban or semi-urban conditions. There is a high quality international airport, as well as a deep water harbor, resulting in very good air and sea communications.

Barbados obtained full independence from the United Kingdom in November 1966 but has remained within the British Commonwealth. The system of government is a parliamentary democracy with a bicameral legislature. The Head of State is the Governor-General as the Queen's Representative, and the Head of Government is the Prime Minister who, like the other members of parliament, is elected by universal adult suffrage. Elections take place every five years. The Prime Minister presides over a Cabinet of Ministers which is responsible to the House of Assembly for the conduct of the affairs of the country.

The economy of the country is based on agriculture and tourism. Agriculture has depended mainly on sugar production but there has been expansion of cotton and food crops production. Efforts are also being made to expand livestock and poultry production and to modernize fishing. Light industries are also being developed to broaden the base of economy.

The economy has been healthy, and in 1975 the GNP was BAR\$524,170,000, giving a per capita GNP of BAR\$2,150 or US\$1,025. Unfortunately, this is offset by a very high cost of living due to inflation and rising cost of imports.

The current national development plan 1973-1977 aims at diversification of the structure of production, full maximum employment of human resources, and greater self-sufficiency in economic performances. A number of development projects designed to achieve these objectives have been seriously affected by the cash-flow crisis of UNDP. The next development plan will be the responsibility of the new Government.

The health situation may be inferred from the following health parameters recorded in 1975: life expectancy, 68.2 years (both sexes); birth rate, 19.2 and natural rate of increase, 10.7 per 1,000 population; crude death rate, 8.5 per 1,000 population; neonatal death rate, 21.8 per 1,000 live births; infant death rate, 29.1 per 1,000 live births; death rate in 1-4-year age group, 1.1 per 1,000 of specific age group; and communicable and parasitic diseases including influenza, pneumonia and bronchitis, accounted for 9% of all deaths and diabetes for 4.9%.

There are 693 acute general hospital beds in the country, 593 at the Queen Elizabeth Hospital and 100 at the St. Joseph (private) Hospital. Forty maternity beds are available at two district maternity hospitals. Long-stay hospital beds amount to 1,456, 658 at the Mental Hospital and 798 at five district hospitals. These give ratios of 28 acute beds, 25 psychiatric beds, and 32 chronic beds per 10,000 population.

Piped water is accessible to 100% of the total population; 67.5% are supplied with water through house connections while 32.5% have easy access to water.

In 1975 the estimated mid-year population structure showed that 26% of the population were under 15 years of age, 9% were under 5 years and 8% were over 65 years. During the past 10 years the birth rate fell from 25.9 to 19.2 per 1,000 inhabitants. Infant mortality fell from 47.7 to 29.1 and maternal mortality from 0.9 to 0.2 per 1,000 live births.

The total national expenditure in 1975 was BAR\$241,421,901, of which BAR\$35,717,820 was allocated to health, representing 14.11% of the national budget and a per capita expenditure on health of BAR\$146.99, or US\$73.49.

The general health policy objectives include introduction of a free national health service, provided within the structure of the national insurance scheme; improvement of the quality of health care and extension of its coverage; reorganization of the administration of the health services; provision of an integrated mental health service; establishment of a health education program with special emphasis on its role in combating malnutrition, diabetes and hypertension, and as support for a strong family planning program; training of medical, nursing and allied health personnel to meet the needs of an improved service; and improvement in the quality of environmental health, including occupational health.

A health planning unit has been set up in the Ministry of Health and one senior and one assistant health planner have been appointed. A Health Planning and Development Committee has also been formed to assist in program formulation and implementation. The main planning tasks will be the completion of a health services study soon to be started, the setting up of a free national health service, and the reorganization of the health service so as to increase coordination at all levels. Special attention will be given to the development of an integrated mental health service.

Infectious and parasitic diseases, including influenza, pneumonia and bronchitis, were responsible for 9% of the total deaths in 1975. Neonatal and infant mortality rates are relatively high, and morbidity from gastrointestinal and parasitic infections makes heavy demands on hospital and outpatient facilities. There is a similar high demand rate for respiratory infections and venereal diseases. The *Aedes aegypti* index was controlled at levels of 0.14 to 0.40% in 1975. An active control program continues to operate.

Great emphasis is given to diseases for which vaccines are available. Polio immunization is given routinely. In addition, a special polio immunization campaign for children under 15 years of age was conducted in 1974-1975; 180,397 doses were administered and 50,836 children protected. In 1975, 20,678 doses of DPT were administered, providing protection for 4,326 children; 4,763 children were given BCG vaccinations; 5,467 inoculations for tetanus toxoid and 16,524 inoculations for smallpox were administered. Although 382 cases of measles were notified in 1975, there is no measles vaccination program.

Maternal and child health clinics are held at the Queen Elizabeth Hospital and at the health centers throughout the country. Ninety-nine per cent of total births in the country were delivered in hospitals. A very active program of family planning is carried out by a strong Family Planning Association which is financed by the Government, International Planned Parenthood Federation, UNDP and UNEPA. It is an autonomous body and is not part of the General Health Service, though government health facilities are used.

The National Nutrition Center continues its valuable work in promoting better nutrition, monitoring the nutritional status of children and providing hospital and domiciliary treatment for malnutrition in children. A national nutrition survey was conducted in 1975 and the evaluation of the results was carried out in 1976.

The 658-bed Psychiatric Hospital continues to be overburdened. In 1975, 860 patients were admitted, of which 580 were readmissions. Attempts continue to improve and expand outpatient and domiciliary treatment. Clinics are held at four centers and at the Queen Elizabeth Hospital.

There are 0.7 dentists per 10,000 population; only three work full time and one part time in the Government Dental Service. The Dental Service includes dental health education, prophylaxis, fillings and extractions. In 1975 there was emphasis on conservative treatment; in a total of 29,669 attendances, 21,676 prophylaxis and fillings were performed as compared to 14,970 extractions.

There are ongoing efforts to improve institutional health care delivery through institutional organization and development in the area of management, as well as in the nursing field.

Piped water supply is available throughout the island. All water is derived from underground sources and is chlorinated, but not filtered or sedimented because the water has naturally filtered through approximately 300 feet of coral rock. The Water Department is under the Ministry of Communications and Works and is very competent.

The Government has obtained a loan from IDB for the construction of a sewage disposal system for Bridgetown. At present, there is no public sewerage system. Disposal is effected by septic tanks and suck wells. Families without house connections use pit latrines. A few large hotels have treatment plants. A sewage treatment plant was installed at the St. Michael's Hospital in 1976.

The Sanitation Service Authority is responsible for the management of solid waste disposal. A fleet of modern vehicles and mechanical road sweepers has been bought and is in operation.

In 1974 the Government provided a new building, staff and equipment for a Veterinary Diagnostic Laboratory. Three international personnel, a veterinary pathologist, a veterinary epidemiologist and a biologist were recruited. Excellent work has been done in the field of leptospirosis and brucellosis serology and in development of laboratory staff through inservice training and overseas fellowships. A considerable amount of community health education, with specific reference to rodent control, has been carried out with good results.

A program for the development and improvement of the district nursing service was considered and approved by the Health Planning and Development Committee. Work on the implementation of nursing care standards was carried out at the St. Michael's District Hospital and at the Mental Hospital. Discussions have been held on the question of transfer of nursing education from the hospital to the formal educational setting of the Division of Health Sciences of the Barbados Community College.

The Central Medical Laboratory is attached to the Queen Elizabeth Hospital. The chief of this laboratory is also in charge of supervision of the Public Health Laboratory. The Veterinary Diagnostic Laboratory is under the Minister of Agriculture.

A tentative health education program was presented to the Health Planning and Development Committee by the fully qualified national health education officer attached to the Ministry. Following this, a Health Education Committee was formed consisting of the health educator, the senior planning officer and the public relations officer of the Ministry of Health to develop programs for dissemination of health information through the media. A trained nurse was appointed to promote health education relative to problems of veterinary public health and rodent control.

High priority has been given to epidemiological surveillance and a senior medical officer has been placed in charge. There has been very close liaison with the Central Medical Laboratory and the Veterinary Diagnostic Laboratory; and a very close relationship has been developed with CAREC, which has rendered valuable assistance to the National Surveillance Unit.

The functions of the Health Planning Unit have not yet been clearly defined, and ad hoc planning activities are performed in preference to systematic program formulation and preparation of a health plan. The latter activities are likely to begin soon.

Central health statistics work is performed by an intermediate-level trained health statistical clerk and an assistant, both of whom have been absorbed into the Planning Unit. The Queen Elizabeth Hospital has a medical records department with 7 trained and 18 untrained staff. The Mental Hospital has one partly trained medical records officer assisted by an untrained records clerk, while in the district hospitals the work is done by the matron and nursing staff.

There is a scarcity of medical, dental and paramedical personnel. There are only four trained hospital administrators in the entire country. The Queen Elizabeth Hospital provides clinical training for the two final years for medical students of the University of the West Indies. The Tercentenary School of Nursing, a department of the Queen Elizabeth Hospital, prepares general nurses, midwives and nursing assistants. Psychiatric nurses receive training at the Mental Hospital.

A review of the human resources inventory shows that only physicians and nurses are in reasonable supply. There is a serious shortage of dentists, veterinarians, sanitary engineers and some categories of paramedical personnel. The number of health personnel, with ratios per 10,000 population, in 1975 was: doctors, 166 (6.8); dentists, 17 (0.7); hospital administrators, 2 (0.1); veterinarians, 6 (0.2); sanitary engineers, 1 (0.04); health educators, 1 (0.04); social workers, 5 (0.2); nutritionist-dietitians, 1 (0.04); nurses (including nurse/midwives), 490 (20.1); public health nurses, 35 (1.4); psychiatric nurses, 120 (4.9); midwives, 47 (1.9); nursing assistants (trained), 290 (11.9); nursing assistants (untrained), 128 (5.3); radiographers, 16 (0.7); X-ray technicians, 12 (0.5); laboratory technicians, 36 (1.5); dispensers, 75 (3.1); physiotherapists, 6 (0.3); occupational therapists, 2 (0.1); dental hygienists, 2 (0.1); dental auxiliaries, 4 (0.2); public health engineering assistants, 5 (0.2); public health inspectors (qualified), 40 (1.6); public health inspectors (partially qualified), 8 (0.3); public health inspectors (unqualified), 36 (1.5); statistical and medical records personnel (trained), 9 (0.4); and statistical and medical records personnel (untrained), 19 (0.8).

The Division of Health Sciences of the Barbados Community College, which was opened in 1974, offers training for public health inspectors and food service supervisors, and a pre-health service course is also conducted. A UNDP-UNICEF-PAHO/WHO regional project for the training of allied health personnel was started in 1975 through the Community College. It provides training in pharmacy, occupational therapy and medical laboratory technology, and a health science tutors course is now in progress. The program is supported by all the English-speaking Caribbean Governments and most of the training is carried out in Barbados and Guyana. There is some training connected with the project in Jamaica and Trinidad and Tobago.

BARBADOS
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	110,480	47.9	26,890	16.2	30,380	16.3
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	2,000	.9	2,000	1.2	2,000	1.1
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COMMUNICABLE DISEASES						
0700 AEDES AEGYPTI-BORNE DISEASES	2,000	.9	2,000	1.2	2,000	1.1
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ENVIRONMENTAL HEALTH SERVICES	108,480	47.0	24,890	15.0	28,380	15.2
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	14,370	6.2	16,235	9.8	18,520	9.9
2100 WATER SUPPLY AND EXCRETA DISPOSAL	13,710	5.9	8,655	5.2	9,860	5.3
2200 SOLID WASTES	32,000	13.9	-	-	-	-
2300 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH- ZOOLOGIES	48,400	21.0	-	-	-	-
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II. DEVELOPMENT OF THE INFRASTRUCTURE	120,370	52.1	138,965	83.8	157,135	83.7
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	109,590	47.4	126,575	76.3	142,855	76.1
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	85,090	36.8	94,715	57.1	102,310	54.5
5100 GENERAL PUBLIC HEALTH SYSTEMS	24,500	10.6	31,860	19.2	40,545	21.6
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DEVELOPMENT OF HUMAN RESOURCES	10,780	4.7	12,390	7.5	14,280	7.6
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6600 DENTISTRY	10,780	4.7	12,390	7.5	14,280	7.6
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GRAND TOTAL	230,850	100.0	165,855	100.0	187,515	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL		AMOUNT	DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL MONTH			MONTHS	AMOUNT				
1977	\$			\$	\$		\$	\$	\$	\$	\$
PAHO---PR	46,580	-	-	4	10,800	-	42	32,340	-	5,440	-
PG	6,000	-	-	-	-	-	10	6,000	-	-	-
WHC---WR	55,870	12	12	-	52,340	2,750	14	10,780	-	-	30,000
UNDP	80,400	19	-	-	80,400	-	-	-	-	-	-
TOTAL	230,850	31	12	4	143,540	2,750	66	49,120	-	5,440	30,000
PCT. OF TOTAL	100.0				62.2	1.2		21.3	-	2.3	13.0
1978											
PAHO---PR	58,750	-	-	4	12,000	-	50	44,250	-	2,500	-
WHC---WR	107,105	12	24	-	61,965	2,750	14	12,390	-	-	30,000
TOTAL	165,855	12	24	4	73,965	2,750	64	56,640	-	2,500	30,000
PCT. OF TOTAL	100.0				44.6	1.7		34.1	-	1.5	18.1
1979											
PAHO---PR	70,925	-	-	4	13,600	-	50	51,000	-	6,325	-
WHC---WR	116,590	12	24	-	69,560	2,750	14	14,280	-	-	30,000
TOTAL	187,515	12	24	4	83,160	2,750	64	65,280	-	6,325	30,000
PCT. OF TOTAL	100.0				44.3	1.5		34.8	-	3.4	16.0

PAHO-PR-REGULAR BUDGET
PW-COMMUNITY WATER SUPPLY
PA-INCAP - REGULAR BUDGET
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
PG-GRANTS AND OTHER CONTRIBUTIONS
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
PJ-GRANTS RELATED TO CAHEC
WHO---WR-REGULAR BUDGET
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
WU-GRANTS AND OTHER FUNDS

BARBADOS
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			136	17,955	136	20,800	136	22,260
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			42	8,040	42	8,525	42	9,020
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			37	5,575	37	6,015	37	6,475
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			24	1,845	24	2,930	24	3,110
	Nurse	0.0887	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			41	5,200	41	5,570	41	5,930
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			40	5,110	40	5,475	40	5,825
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			39	6,340	39	6,790	39	7,230
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			44	4,810	44	5,170	44	5,515
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			228	65,370	216	50,000	216	50,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	Total All Programs			664	139,845	652	134,755	652	140,185
	=====			=====	=====	=====	=====	=====	=====

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This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BARBADOS-3300, ANIMAL AND HUMAN HEALTH

In order to upgrade animal health, this project is strongly committed to reorganizing the Veterinary Services in the Ministry of Agriculture, Science and Technology and in establishing a Veterinary Public Health Unit in the Ministry of Health; to improving the operations of the Veterinary Diagnostic Laboratory, the training of animal health assistants and public health inspectors (meat inspectors) and the serological surveillance of leptospirosis and brucellosis. Its objectives also include an island-wide rodent control plan, a stray dog control program, and a public health education campaign centered on leptospirosis and rodent control.

TOTAL		11	-	-	TOTAL	UNDP	48,400	-	-
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P-5 PROJECT MANAGER	UNDP	5	-	-	PERSONNEL-POSTS		48,400	-	-
4.4131									
P-4 VETERINARIAN	UNDP	6	-	-					
4.4132									

BARBADOS-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to improve the level of health care delivery and to extend coverage to the entire population. The objectives are to establish and maintain the institutional framework for close collaboration between the Government and PAHO/WHO for the improvement of the level of health throughout the country; to strengthen and support the health planning process throughout the health services; to coordinate all health activities throughout the country including international assistance in the field of health; and to promote the integration of curative and preventive aspects of health care as well as integration of health plans with the national socioeconomic development plan.

TOTAL		24	36	36	TOTAL	WR	85,090	94,715	102,310
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P-5 PAHO/WHO REPRESENTATIVE	WR	12	12	12	PERSONNEL-POSTS		52,340	61,965	69,560
4.0916					DUTY TRAVEL		2,750	2,750	2,750
G-7 ADMINISTRATIVE ASSISTANT	WR	-	12	12	COMMON SERVICES		30,000	30,000	30,000
4.4709									
G-5 SECRETARY	WR	12	12	12					
4.3081									

BARBADOS-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to improve the level of health in all parts of the country. Its objectives are to prepare a national health plan aimed at integration of health activities into the national socioeconomic development plan; to prepare programs for the control of communicable diseases including immunization; to improve the level of hospital medical care and of maternal and child health; to strengthen the statistical and medical records of the Ministry of Health and its institutions; to strengthen the nursing services by the formulation of a program for district nursing services and by the implementation of the nursing care standards set up for the Caribbean area; to train all categories of medical, nursing and allied health personnel within the country and to provide fellowships for all levels of personnel to meet the identified needs of the various programs; and to introduce technical and administrative reforms necessary for improved coordination and for economic and efficient use of human and material resources.

TOTAL		28	36	36	TOTAL	PR	24,500	31,860	40,545
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FELLOWSHIP MONTHS	PR	28	36	36	SUPPLIES AND EQUIPMENT		2,940	-	3,825
					FELLOWSHIPS		21,560	31,860	36,720

BARBADOS-6600, DENTAL EDUCATION

No formal agreement exists for this project. There is a total of 17 dentists in the country. Two are in full-time Government employment and one is part-time. A school dental service is provided and there are dental outpatient clinics at the Queen Elizabeth Hospital, the Mental Hospital and the district hospitals and outpatient health clinics. The service is largely confined to extractions but the amount of conservative dentistry is growing.

TOTAL		14	14	14	TOTAL	WR	10,780	12,390	14,280
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FELLOWSHIP MONTHS	WR	14	14	14	FELLOWSHIPS		10,780	12,390	14,280

BELIZE

Belize, situated in Central America, is bounded on the north by Mexico, on the west and south by Guatemala, and on the east by the Caribbean Sea. It has an area of 8,866 square miles (22,963 square kilometers) and an estimated population (1974) of 135,277, giving it a low population density of 15 persons per square mile or six persons per square kilometer. About 42,000 people live in Belize City, the major city; the population in the towns including Belmopan, the new capital, number about 32,000. This means that 56% of the population live in urban or semi-urban areas while 44% live in rural areas which include tiny islets in the coastal waters called cayes. Belize enjoys full internal self-government, with the United Kingdom having responsibility for defense and external affairs.

Women of childbearing age and children under age 15 together make up about 62% of the population. The literacy rate is 90%. Life expectancy at birth is 68.4 years (1970). The crude death rate is 5.3 per 1,000 population and the infant mortality rate is 38.3 per 1,000 live births.

Agriculture forms the basis of the economy. Sugar makes the greatest contribution; bananas and citrus are grown for export as well as local markets; other important crops are corn and rice; lobster tails and shrimp are exported in fair numbers. There are a few light industries, for example, garment manufacturing and a brewery. The Government continues its program to increase agricultural production, and so reduce reliance on imports, while at the same time increasing foreign exchange earnings.

The total health expenditure by the Ministry of Health in 1974 was BLZ\$2,209,285 (US\$1,227,380) which is 8% of the national budget, and represents a per capita expenditure of BLZ\$16.39 (US\$9.10).

Infectious and parasitic diseases accounted for 18.8% of all deaths in 1973 and of these the majority were in children under five years of age. The country remains free of the *Aedes aegypti* mosquito. A national malaria eradication program is in operation; the disease is well controlled but the country is vulnerable to a resurgence of cases due to immigrant workers from the other countries of the Region where the disease is rampant. The exact prevalence of tuberculosis is not known; however, a tuberculosis control program has been formulated and is in effect. A venereal disease control program is in operation. Enteritis ranked first in causes of death in children under five years of age, and second in causes of death for all ages.

Special attention is being given by the Government to increasing the coverage and improving the quality of services for mothers and children, who, as pointed out above, comprise a large percentage of the population. In this connection, the Government, with assistance from PAHO/WHO and UNICEF, will implement a program which has been drawn up for maternal and child health care.

Further work is being done on analyzing the data available for diagnosing the nutritional status of the population. Nutrition activities are included in the maternal and child health program, and nutrition education for the whole community is also carried out.

Dental disease is a problem. A free dental service is provided for schoolchildren and indigents, but at present the work performed is mostly extractions due to the shortage of dentists. Training of dental assistants is now in effect. Plans are also being made to expand the ophthalmology services through the provision of a clinic, which will be free.

The mental health program is going well with inpatient, outpatient and home visiting services. The community attitude toward mental and psychological disorders is very encouraging as well.

Diseases of the cardiovascular system and hypertension were the leading causes of death in 1974. Neoplasms ranked seventh.

Improvement of the environment has been given high priority by the Government. The year 1975 marked the start of a long-term project for a sewerage system and improved water supplies for Belize City. The project also includes solid waste disposal and fire protection, as well as institutional development of the Water and Sewage Authority. PAHO/WHO is acting as executing agency for CIDA, through whose funds, both grant and loan, the project is mainly being financed. The Government, along with CARE and the Peace Corps, have been giving attention to improving rural water supplies (both quality and quantity) in certain areas. It is hoped that this will soon be expanded to all the rural areas of the country, with financial assistance from CIDA.

Of the total population, 36.5% have piped water in their homes (56.4% of urban and 13.2% of rural population); 17.7% have easy access to piped water ("easy access" being defined as within 1/4 mile from a standpipe). These figures are far below the present goal for the Americas of 80% and 50% respectively.

A disaster plan is reviewed every year at the beginning of the hurricane season by the Center Emergency Organization. The Health Department plays an important role in this, being responsible for provision of emergency hospital facilities, maintenance of sanitary conditions, etc.

In the field of veterinary public health, plans have been made for extension of the veterinary laboratories to give greater diagnostic facilities. Belize is participating in a UNDP-assisted regional project for the training of veterinary assistants. After three years free of rabies, there was a small localized outbreak of rabies early in 1975, when three cases were confirmed.

Nursing services, under the responsibility of a principal nursing officer, are provided at hospitals and health centers. Nurses also make home visits. Nursing aides are used. In some rural areas, "nannies" are still used in midwifery; in these areas, the nannies are given some basic training. The first group of nurse-anesthetists has been trained locally and is functioning satisfactorily.

There is one central laboratory in Belize City which does work for all the hospitals, as well as any public health work needed. Arrangements are now being made, however, for using the small laboratories attached to the district hospitals, and personnel have already been trained. There are three veterinary diagnostic laboratories.

Epidemiological surveillance has been strengthened; efforts are being made to improve the reporting of notifiable diseases, and the epidemiologist has had two short training courses.

In the field of health education, there is a weekly radio program. Pamphlets and posters are prepared for display in health establishments, and education is provided by public health nurses and public health inspectors in the course of their work. However, much more needs to be done in this field on an organized basis.

The health system is based on a chain of hospitals strategically situated throughout the country and publicly owned. Inpatient medical care is provided at a modest charge or free, depending on the financial status of the patient. Outpatient treatment is free. The hospital facilities in the district are underutilized, but it is planned to correct this by strengthening these hospitals through the provision of laboratory and X-ray services and providing increased staff to meet the anticipated increased activities. Training of laboratory and X-ray assistants has already been completed, as well as training of nurse-anesthetists. A new hospital is being constructed in the Orange Walk district.

In addition to hospitals, there are health centers in urban and rural areas. Services provided, mainly through the nursing corps, include first aid and the care of the mother and child. Three new health centers are planned. In addition to health centers there are fully-equipped mobile health clinics which serve areas where there are no health facilities. This is in accordance with Government's policy of bringing health services within the reach of all the population.

The Government recognizes the need for efficient organization of general services to support the technical activities for the improvement of health, and efforts are being made to correct the situation. Organizational structure and hospital administrative practices are some of the areas receiving attention. There is no full-time planning unit in the Ministry of Health, but there is a Health Planning Committee whose members include a representative from the Economic Planning Unit.

There is a shortage of trained personnel in many fields, for example, dentistry and sanitary engineering. In other fields the distribution is very uneven, with a preponderance in urban and a scarcity in rural areas. The overall ratio of doctors per 10,000 population for the whole country is 3.2, but in the urban areas (over 20,000 population) it is 6.4 while in the rural areas (under 2,000 population) it is only 0.9. Similarly with nursing, the overall ratio per 10,000 population for the whole country is 6.5 but in rural areas it is only 2.4 and in the urban areas 11.8.

The need for the development of skilled manpower has been recognized, and this is a high priority of the Government. The Nursing School is being upgraded; there is a continuing program of inservice training for nurses and for public health inspectors; and local seminars for nurses, doctors and other categories of persons take place from time to time. Plans include continued training abroad of all categories of personnel, as necessary, in basic courses; continued postbasic training in specific fields; and training of auxiliary workers in dentistry and veterinary public health. Belize is participating in the UNDP-assisted regional project on education and training of allied health personnel.

Maintenance of buildings, equipment and vehicles badly needs improving. A review of the present situation has been made and recommendations for a program of maintenance put forward.

BELIZE
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	45,600	40.6	52,095	42.9	54,720	42.2
=====	=====	=====	=====	=====	=====	=====
COMMUNICABLE DISEASES						
0200 MALARIA	29,630	26.4	30,860	25.4	32,000	24.7
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	15,970	14.2	21,235	17.5	22,720	17.5
II. DEVELOPMENT OF THE INFRASTRUCTURE	66,525	59.4	69,245	57.1	74,815	57.8
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	63,025	56.3	65,345	53.9	70,770	54.7
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	44,500	39.8	46,610	38.5	48,550	37.5
5100 GENERAL PUBLIC HEALTH SYSTEMS	18,525	16.5	18,735	15.4	22,220	17.2
DEVELOPMENT OF HUMAN RESOURCES	3,500	3.1	3,900	3.2	4,045	3.1
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6400 ENVIRONMENTAL SCIENCES	3,500	3.1	3,900	3.2	4,045	3.1
GRAND TOTAL	112,125	100.0	121,340	100.0	129,535	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

BELIZE
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III AMRO-5030(PR/WR)	<u>Program Planning and General Activities</u>			50	26,635	50	28,190	50	29,820
	Area Representative Seminar Costs	0.0283	D-1						
AMRO-1330 AMRO-1331 (PR/PG)	<u>Maternal and Child Health and Family Welfare</u>			10	2,005	10	2,095	10	2,190
	Medical Officer Consultants and Seminars	0.3365	P-5						
AMRO-2030(PR/WR)	<u>Environmental Health Services</u>			30	4,050	50	7,335	50	10,995
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130 AMRO-3131 (PR/WR/ AMRO-3230 PG/WT)	<u>Animal Health and Veterinary Public Health</u>			15	2,685	20	3,765	20	4,090
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687	P-3						
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			80	10,680	60	8,510	50	7,585
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330 AMRO-4331 (PR/WR)	<u>Epidemiological Surveillance</u>			15	5,870	15	6,235	15	9,035
	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			10	1,330	10	1,390	10	1,465
	Health Planner	0.2031	P-4						
AMRO-5430(PR/WR)	<u>Statistics and Information Systems</u>			10	1,745	10	1,860	10	2,000
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			30	3,250	30	3,410	30	3,570
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			10	835	10	1,305	10	1,395
	Health Manpower Officer	0.3627	P-4						
	<u>Total All Programs</u>			260	59,085	265	64,095	255	72,145

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

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BELIZE - DETAIL

BELIZE-0200, MALARIA AND Aedes aegypti ERADICATION

Malaria transmission continues to be held at a low level, with an increase in surveillance capabilities and a reduced area under spraying operations. For the most part, positive cases are focalized in the south, with sporadic cases being detected in other districts. Transitory farm labor groups from neighboring countries contribute to the persistence of transmission, affording a high element of risk due to countrywide receptivity and vulnerability.

Technical problems are not evident, i.e., DDT continues to be effective, and radical treatment of positive cases (all P. vivax) is successful in eliminating the parasite. The Aedes aegypti vector has not been detected within the country. The surveillance team of five inspectors and one supervisor continues to report total negativity.

TOTAL		12	12	12	TOTAL	WR	29,630	30,860	32,000
P-2 SANITARIAN	WR	12	12	12	PERSONNEL-POSTS		25,000	26,200	27,300
4.2135					DUTY TRAVEL		3,000	3,000	3,000
					SUPPLIES AND EQUIPMENT		1,630	1,660	1,700

BELIZE-1300, MATERNAL AND CHILD HEALTH

Mortality and morbidity data reveal that there is room for improvement in the health situation of mothers and children, who together constitute more than 33% of the population. The Government, aware of this situation, has stated that maternal and child health care is one of its main priorities.

The purpose of the project is to assist the Government in improving and extending maternal and child protection and care activities to the whole country.

TOTAL		11	11	11	TOTAL	PR	15,970	21,235	22,720
FELLOWSHIP MONTHS	PR	11	11	11	SUPPLIES AND EQUIPMENT		500	500	500
					FELLOWSHIPS		8,470	9,735	11,220
					COURSE COSTS		7,000	11,000	11,000

BELIZE-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purpose of this project is to cooperate with the Government in health planning and programming within the context of social and economic development and to assist the national health authorities in preparing and carrying out activities requiring international cooperation.

TOTAL		12	12	12	TOTAL	WR	44,500	46,610	48,550
P-5 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		34,000	35,700	37,200
4.3403					DUTY TRAVEL		2,350	2,350	2,350
					COMMON SERVICES		8,150	8,560	9,000

BELIZE-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to advise the Government in defining a clear health policy and program and in promoting a more efficient system for the delivery of health services so that the entire population will benefit from them. Emphasis will be placed on the optimal use of the scarce human and financial resources and on the development of the full potential of all health personnel.

TOTAL		1	-	-	TOTAL	WR	18,525	18,735	22,220
CONSULTANT MONTHS	WR	1	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
TOTAL		11	11	11	SUPPLIES AND EQUIPMENT		4,000	4,000	4,000
FELLOWSHIP MONTHS	WR	11	11	11	FELLOWSHIPS		8,470	9,735	11,220
					COURSE COSTS		3,355	5,000	7,000

BELIZE-6400, SANITARY ENGINEERING EDUCATION

The purpose of this project is to assist the Government through the organization of intensive short courses, seminars, conferences and other educational devices in selected fields of environmental health.

TOTAL		1	1	1	TOTAL	WR	3,500	3,900	4,045
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		800	900	645

BOLIVIA

Bolivia is a landlocked country situated in the central part of South America, 1,098,581 km² in area, with three clearly defined geographical regions running side by side from north to south: the high plateau and the mountain ranges which surround it account for 16% of the total area and their climate is normally arid; the valleys and lowlands, which are semi-tropical, make up only 14% of the territory; and the plains, which account for 70% of the country's area, are tropical. Approximately 25% of the territory is more than 2,500 meters above sea level, 13% between 2,500 and 600 meters, and the remainder under 600 meters.

A program for the highway integration of the country is underway and has been assigned high national priority. It will provide the necessary communications between the various regions of the country. Among others, the La Paz-Beni highway is about to be completed. Most of the roads, whose condition is still unsatisfactory, are found in the highlands and the valleys, and the linkage of these areas with the plains is very limited.

In 1976 the total population of the country numbered 5,789,000 inhabitants. Approximately 36% of the total population is made up of whites and mestizos who speak Spanish; another 36% of the population is Kechua and speaks their own language, and the remainder consists of different Indian groups.

In September 1976 a national population and housing census was carried out, the first since 1950, which will make it possible to update knowledge on these aspects.

For the year 1975, the main demographic indicators show a birth rate of 44.0 live births per 1,000 population; a general mortality rate of 18.0 per 1,000 population; a population growth rate of 2.7% annually; and a fertility rate of 205.9 per 1,000 women between the ages of 15 and 44 years. Life expectancy at birth is estimated at 47 years. The illiteracy rate for the whole country is 37.6%.

The per capita GDP in 1975 was US\$377.00 at 1975 prices. The Government has drawn up the Five-Year Development Plan for the period 1976-1980, which sets forth the policies to be pursued in each development sector. This plan includes the Health Plan for the same period. Among the objectives to be attained with that Plan in 1980 is an increase in the per capita GDP to US\$475.00 at 1975 prices, with a GDP growth rate of 8% and a per capita GDP growth rate of 5.1%. In the health sector, it is planned to achieve by 1980 a life expectancy at birth of 52 years, to reduce general mortality and infant mortality to 16.9 and 11.0 per 1,000 population, respectively.

Communicable diseases in general are still the principal cause of mortality and morbidity in the country, and the Department of Ecology of the Ministry of Social Welfare and Public Health is responsible for the control of those diseases.

In 1965, the incidence of malaria was approximately 1,000 cases, but it has increased to the point where, in 1975, it was estimated at 10,000 cases. Smallpox was eradicated from the country in 1963, and the immunization level of the general population is acceptable. Tuberculosis continues to be the most important communicable disease, and the general prevalence in the population is estimated at 1.4%. Leprosy is still an endemic disease in the east of the country, and as regards venereal diseases, no reliable information is available for evaluating the problem.

Infectious diseases of the respiratory tract and of the digestive system are important problems throughout the country. There have been no cases of urban yellow fever in the country since 1942, but jungle yellow fever is endemic in the southeastern region of the country and in the northern part of the Department of La Paz. In 1975 there was an outbreak with 151 cases. The incidence of intestinal parasitic diseases is believed to be high, but the real magnitude of the problem is unknown. Bolivian hemorrhagic fever is a serious problem primarily because of the severity of the symptoms, but is limited to one part of the Department of Beni.

Although the prevalence of Chagas' disease is estimated to be very high, on the basis of certain partial studies, there is no clear awareness of its magnitude, which could be translated into a formal control program. Plague, as well as exanthematic typhus, occurs in some regions of the country.

In the age group under five years, measles is an important cause of morbidity and mortality and occurs in outbreaks that reflect, among other factors, insufficient coverage of vaccination programs. The incidence of poliomyelitis, diphtheria and whooping cough is also high, but is expected to be reduced through mass vaccination programs that are being undertaken.

The National Center for Tropical Diseases, set up in Santa Cruz with the assistance of the Government of Belgium, is responsible for the study and investigation of the diseases that predominate in the tropical regions of the country. Through specific agreements with the Government of Bolivia, PAHO/WHO is assisting in the conduct of an overall program of epidemiology that will make it possible to improve, in the short-term and according to priorities, the control of diseases and to strengthen the formal system of epidemiological surveillance. Recently activities for the control of rheumatic fever and of arterial hypertension were initiated.

Maternal and child health is the program with the highest priority in the health sector of the country, both because of the population groups involved (41.5% of the population under 15 years of age and 21.4% of women in the reproductive age, which make up 62.9% of the total population) and because of the damage to the health of these population groups in which morbidity and mortality is high. With the assistance of UNFPA and PAHO/WHO, a broad program has been launched, aimed at achieving nationwide coverage of these population groups.

The lack of food and its inadequate use contribute to malnutrition, which principally affects children under five years of age, of which approximately 43% are estimated to suffer from malnutrition, primarily Grade I. The average daily intake per person is estimated at 2,000 calories and 63 grams of protein, of which only 13.6 grams are animal protein. With the assistance of PAHO/WHO, a food and nutrition program comprising broad-based projects is being developed, and with the participation of the Inter-Agency Project for the Promotion of National Food and Nutrition Policies, these policies have already been established for the country. Endemic goiter occurs throughout the country and predominates in certain regions. With the participation of different national institutions and the assistance of UNICEF and of PAHO/WHO, a program for the production of iodized salt is being undertaken.

Insufficient information is available to appraise the magnitude of mental disorders in the country. In Sucre there is a hospital for mental patients, but there are no other specialized services in the remainder of the country. Insufficient information is available concerning dental health problems, and dental health programs are being undertaken.

With respect to piped water supplies, 81% (1975) of the urban population and 6.0% of the rural population have them. These figures include both in-house connections and easily accessible water points. Only 22.6% of the urban population and 8.4% of the rural population have drainage and excreta disposal services. A plan is being prepared, with the participation of the Ministry of Urban Development and Housing, IDB, IBRD and PAHO/WHO, for restructuring the potable water and sewage disposal systems. Only 31% of the population living in cities with more than 20,000 inhabitants have refuse collection services, but excreta disposal services are inadequate. As regards soil pollution, this is usual in the rural area and the pollution of watercourses is increasing because of the lack of control of industrial wastes and sewage. The use of pesticides and insecticides in agriculture is increasing and giving rise to more and more hazards. Mining is a fundamental resource of the country and accounts for 78% of exports; it employs 60,000 workers, whose occupational hazards, such as silicotuberculosis, are widespread. Increasing importance is being assigned to occupational health. With the assistance of UNDP and PAHO/WHO, the National Institute of Occupational Health is conducting a large-scale program.

The most important zoonotic diseases in the country are canine rabies, brucellosis and foot-and-mouth disease. Various programs are being conducted for the control of these diseases, both as regards their effect on human health and their economic effects, with the assistance of IDB and PAHO/WHO. Programs for the control of foodstuffs and of drugs are just beginning, but there is considerable interest in conducting them.

With respect to nursing services, the lack of personnel at all levels is considerable and, consequently, with the assistance of PAHO/WHO, special attention is being assigned to programs of personnel training and for the improvement of the services. In particular, many courses for the training of auxiliaries are being conducted. Public health laboratory services are insufficient, and little use is made of them. At present a program designed to strengthen them, to equip them and to train

their personnel is being undertaken with the assistance of PAHO/WHO. Programs of epidemiological surveillance are being hampered by lack of notifications and lack of resources of all kinds for executing them; however, they are being strengthened.

Very few resources are assigned to health education, and its importance is not yet widely recognized. This year the Department of Rehabilitation of the Ministry of Social Welfare and Public Health was established and is beginning to organize and coordinate services in the country, primarily physical rehabilitation services.

Health care in the country is the responsibility of the Ministry of Social Welfare and Public Health and of the other 23 institutions that make up the health sector, in addition to private services. It is estimated that approximately 60% of the total population has access to health services. However, only approximately 50% of the installed capacity is used. As for the rural population, its health care is provided exclusively by the Ministry of Social Welfare and Public Health. Considerable efforts are being made to extend the coverage of services to the rural population and to the population of the shantytowns. In addition to this general policy, some specific programs are being conducted with the assistance of PAHO/WHO, UNICEF, AID, World Bank, and other agencies. They are located in selected areas of Chuquisaca and Tarija, Ingavi and Santa Cruz, and their purpose is to design basic service systems based on systems of referral to higher levels as well as the active participation of the community, which can be reproduced in larger areas of the country.

In 1975 there was a total of 713 hospital establishments available so that the bed/population ratio was 1.6 per 1,000 population, but they were distributed primarily in the urban areas and substantially underutilized. With the assistance of PAHO/WHO, the Sectoral Planning Office, which is located in the Ministry of Social Welfare and Public Health, has prepared the Five-Year Health Plan 1976-1980 up to the level of guidelines and general policies and their alignment with the Economic and Social Development Plan, and at the present time it is being broken down into regional plans.

The national health statistics system is being redefined and strengthened with the assistance of PAHO/WHO. It will form part of an information system and will emphasize the training of personnel at all levels and the organization of services in health units and health establishments. At the request of the national authorities, PAHO/WHO is helping to conduct a program for the improvement of the general administration of health services aimed primarily at strengthening the administrative infrastructure of the sector. Efforts to rationalize the basic systems of support and to redefine operating methods and procedures, especially of the decentralized units of the Ministry, have already begun.

The training of health manpower is primarily the responsibility of the Ministry of Social Welfare and Public Health and the Bolivian universities. In Bolivia, the universities are coordinated under the National Council of Higher Education. The universities concern themselves primarily with the training of professional personnel and, at the present time, are attempting to adjust their plans and programs to the needs of the country, with the assistance of PAHO/WHO. The Ministry is responsible for the training of mid-level and auxiliary personnel, and for that purpose, in 1976, a Department of Manpower Development and Research was set up and, through the School of Public Health, has begun to train the mid-level and auxiliary personnel required by the sector.

The production of biological products for human use is still very limited, although the National Laboratories Institute is increasing its production with the assistance of the Government of France and of PAHO/WHO. The production of biologicals for animal use is more advanced, especially as regards rabies vaccine, the first lots of which have satisfied the established standards.

The activities planned for the health sector in the period 1976-1980 call for considerable financial resources. In that regard, the national authorities have budgeted substantial contributions for the sector, but external financial aid is also needed; accordingly, with the coordination of PAHO/WHO, projects have been submitted to UNDP, UNICEF, IDB, AID and the World Bank, which have programmed important contributions.

Programs for providing low-cost textbooks for medical and nursing students and basic clinical and diagnostic equipment for medical students have been successfully expanding in the country's universities. The Ministry of Social Welfare and Public Health is assisting in the project of establishing a library specialized in the health sciences.

The Ministry of Social Welfare and Public Health has reorganized the National Health Code, which is in the process of revision and final approval. At the same time, the pertinent regulations are being drafted and the Organic Law of the above-mentioned Ministry is being revised.

BOLIVIA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	860,168	72.1	734,119	67.1	555,023	58.0
SERVICES TO INDIVIDUALS	487,186	40.7	391,671	35.7	265,434	27.7
COMMUNICABLE DISEASES						
0200 MALARIA	48,935	4.1	51,630	4.7	54,465	5.7
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	423,651	35.4	332,731	30.3	197,749	20.6
1400 NUTRITION	14,600	1.2	7,310	.7	13,220	1.4
ENVIRONMENTAL HEALTH SERVICES	269,557	22.7	230,518	21.1	166,869	17.5
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	64,205	5.4	66,410	6.1	69,425	7.3
2100 WATER SUPPLY AND EXCRETA DISPOSAL	11,904	1.0	-	-	-	-
3000 OCCUPATIONAL HEALTH	51,000	4.3	-	-	-	-
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3200 FOOT-AND-MOUTH DISEASE	140,448	11.8	162,108	14.8	96,444	10.1
3300 ZOOZOSES	2,000	.2	2,000	.2	1,000	.1
COMPLEMENTARY SERVICES	103,425	8.7	111,930	10.3	122,720	12.8
4100 NURSING	34,750	2.9	39,155	3.6	45,120	4.7
4200 LABORATORIES	9,010	.8	10,655	1.0	11,460	1.2
4300 EPIDEMIOLOGICAL SURVEILLANCE	59,665	5.0	62,120	5.7	66,140	6.9
II. DEVELOPMENT OF THE INFRASTRUCTURE	332,475	27.9	361,305	32.9	399,880	42.0
HEALTH SYSTEMS	279,925	23.5	316,520	28.8	342,480	35.8
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	111,000	9.3	127,020	11.6	133,835	13.9
5100 GENERAL PUBLIC HEALTH SYSTEMS	43,240	3.6	49,555	4.5	58,420	6.1
5200 MEDICAL CARE SYSTEMS	29,465	2.5	44,975	4.1	47,405	5.0
5400 STATISTICS AND INFORMATION SYSTEMS	41,575	3.5	38,840	3.5	40,995	4.3
5500 MANAGEMENT SYSTEMS	54,645	4.6	56,130	5.1	61,825	6.5
DEVELOPMENT OF HUMAN RESOURCES	52,550	4.4	44,785	4.1	57,400	6.2
6100 PUBLIC HEALTH	12,200	1.0	10,200	.9	9,200	1.0
6200 MEDICINE	8,820	.7	7,155	.7	11,020	1.2
6300 NURSING	9,130	.8	8,965	.8	12,000	1.3
6400 ENVIRONMENTAL SCIENCES	14,470	1.2	11,310	1.0	17,220	1.8
6500 VETERINARY MEDICINE	5,620	.5	4,155	.4	4,560	.5
6600 DENTISTRY	2,310	.2	3,000	.3	3,400	.4
GRAND TOTAL	1,192,643	100.0	1,095,424	100.0	954,903	100.0

*LESS THAN .05 PERCENT

BOLIVIA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA IV CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA IV (PR)	<u>Program Planning and General Activities</u>			90	61,260	90	64,875	90	67,960
	Area Representative	0.0294	D-1						
AMRO-1440 (WR)	<u>Nutrition</u>			115	16,910	100	16,075	110	18,725
	Medical Officer	4.0877	P-4						
AMRO-2940 (PR)	<u>Regional Development</u>			50	8,725	55	10,025	55	10,645
	Sanitary Engineer	0.4266	P-5						
AMRO-3140 (WR)	<u>Animal Health and Veterinary Public Health</u>			70	7,055	90	13,630	80	13,350
	Veterinarian	4.3088	P-4						
AMRO-4140 (PR)	<u>Nursing</u>			30	5,270	30	5,705	25	5,290
	Nurse	0.0893	P-4						
AMRO-4240 (PR)	<u>Laboratories</u>			85	12,430	85	13,200	90	14,715
	Laboratory Adviser	0.4383	P-5						
AMRO-4340 (PR)	<u>Epidemiological Surveillance</u>			45	7,380	40	7,275	40	7,415
	Epidemiologist	0.2028	P-5						
AMRO-6040 (PR/WR)	<u>Development of Human Resources</u>			135	21,595	135	22,825	120	24,025
	Medical Educator	0.3401	P-5						
	Nurse Educator	4.4046	P-4						
	Total All Programs			620	140,625	625	153,610	610	162,125
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BOLIVIA - DETAIL

BOLIVIA-0200, MALARIA ERADICATION

The purposes of this project are to eradicate malaria in areas currently in the consolidation-phase where transmission has been interrupted; to maintain a system of epidemiologic surveillance for early detection of imported cases; to interrupt or localize transmission in areas where systematic investigation would offer good prospects of eradication; to establish an epidemiologic surveillance system allowing early detection and treatment of cases; to reduce transmission in areas where progress depends on the solution of serious operational or technical problems; to persist in the execution of other health programs using similar methods; and to provide multiple training to malaria eradication personnel with a view to integrating the programs for extension of general health services in the consolidation-phase areas.

TOTAL		12	12	12	TOTAL	PR	48,935	51,630	54,465
-----		-----	-----	-----	-----	-----	-----	-----	-----
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.0334					DUTY TRAVEL		3,150	3,300	3,500
TOTAL		3	3	3	SUPPLIES AND EQUIPMENT		4,000	4,000	4,000
-----		-----	-----	-----	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	PR	3	3	3					

BOLIVIA-1300, MATERNAL AND CHILD HEALTH

The purpose of this project is to cooperate with the Government and with the Division of Maternal and Child Health and Family Welfare of the Ministry of Health in improving maternal and child protection and health care services and extending them throughout the country, while also promoting family welfare.

TOTAL		17	12	-	TOTAL	UNFPA	423,651	332,731	197,749
-----		-----	-----	-----	-----	-----	-----	-----	-----
P-4 MEDICAL OFFICER	UNFPA	12	12	-	PERSONNEL-POSTS		43,500	36,000	-
4.4368					PERSONNEL-CONSULTANTS		27,000	47,125	7,500
P-3 NURSE	UNFPA	5	-	-	DUTY TRAVEL		1,500	1,500	-
4.4369					CONTRACTUAL SERVICES		78,350	32,840	15,840
TOTAL		8	13	2	SEMINAR COSTS		6,970	5,900	6,440
-----		-----	-----	-----	SUPPLIES AND EQUIPMENT		79,682	54,175	54,785
CONSULTANT MONTHS	UNFPA	8	13	2	FELLOWSHIPS		43,500	23,000	11,000
TOTAL		56	26	11	MISCELLANEOUS COSTS		32,122	15,100	11,982
-----		-----	-----	-----	COURSE COSTS		89,593	94,757	76,790
FELLOWSHIP MONTHS	UNFPA	56	26	11	LOCAL PERSONNEL COSTS		21,434	22,334	13,412

BOLIVIA-1400, NUTRITION

The purpose of this project is to improve nutrition levels, especially among mothers and children under six years of age.

TOTAL		11	6	11	TOTAL	PR	10,470	7,310	13,220
-----		-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	PR	11	6	11	SEMINAR COSTS		2,000	2,000	2,000
					FELLOWSHIPS		8,470	5,310	11,220

BOLIVIA-1401, ENDEMIC GOITER CONTROL

Four towns in Bolivia in the area of high endemic goiter are being studied to determine the incidence of goiter in a sample population, with the administration of iodized oil orally in two towns and intramuscularly in the other two towns, as a demonstration of its efficacy as an interim measure until iodized salt is readily available.

TOTAL	PH	4,130	-	-
-----	-----	-----	-----	-----
LOCAL COSTS		4,130	-	-

BOLIVIA-2000, ENVIRONMENTAL SANITATION

The general aim of this project is to improve sanitation conditions in urban and rural areas. The specific means for its achievement are to reorganize the sector in an effort to unify, or at least coordinate, the work of the various agencies concerned through a clear definition of the functions of each and to gradually improve their technical and administrative capacity through an institutional development program; to increase coverage in terms of the population served by water supply, sewerage, excreta disposal and trash removal systems; to offer inservice training and specialized courses to professional, technical and auxiliary personnel of the sector; and to bring about an improvement of sanitary conditions in the sale, handling and production of food.

		FUND	1977	1978	1979			FUND	1977	1978	1979
		-----	-----	-----	-----			-----	-----	-----	-----
			\$						\$	\$	\$
TOTAL			12	12	12	TOTAL		PR	64,205	66,410	69,425
P-4	SANITARY ENGINEER	PR	12	12	12	PERSONNEL-POSTS			39,475	41,675	43,905
	.0342					PERSONNEL-CONSULTANTS			5,400	6,000	6,800
						DUTY TRAVEL			3,150	3,300	3,500
						SUPPLIES AND EQUIPMENT			900	900	900
TOTAL			2	2	2	FELLOWSHIPS			10,780	9,735	11,220
						COURSE COSTS			4,500	4,800	3,100
CONSULTANT MONTHS		PR	2	2	2						
TOTAL			14	11	11						
FELLOWSHIP MONTHS		PR	14	11	11						

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

BOLIVIA-4100, NURSING SERVICES

The purpose of this project is to cooperate with the National Nursing Division and Health Unit of the Government in expanding the coverage of health services and improving the quality of care provided to the population.

TOTAL		12	12	12	TOTAL	WR	34,750	39,155	45,120
P-3 NURSE 4.0338	WR	12	12	12	PERSONNEL-POSTS		28,600	30,700	33,000
					DUTY TRAVEL		3,150	3,300	3,500
					SEMINAR COSTS		2,000	2,000	2,000
TOTAL		-	3	6	SUPPLIES AND EQUIPMENT		1,000	500	500
					FELLOWSHIPS		-	2,655	6,120
FELLOWSHIP MONTHS	WR	-	3	6					

BOLIVIA-4200, DEVELOPMENT OF LABORATORIES AND BLOOD BANKS

The purpose of this project is to organize a system of diagnostic laboratories and blood banks to provide effective support for disease prevention and control and health care activities. In addition, fellowships and courses will be provided for the training of auxiliary personnel.

TOTAL		1	1	1	TOTAL	PR	9,010	10,655	11,460
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		1,000	2,000	2,000
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		3,000	3,000	3,000
FELLOWSHIP MONTHS	PR	3	3	3					

BOLIVIA-4300, EPIDEMIOLOGY

The chief purposes of this project are to improve the administrative system for communicable disease control; gradually organize an epidemiologic surveillance system; increase the coverage of immunization programs; improve the network of laboratories for diagnosis of communicable diseases; and integrate tuberculosis and leprosy control into the general health services.

TOTAL		12	12	12	TOTAL	PR	59,665	62,120	66,140
P-5 EPIDEMIOLOGIST 4.3333	PR	12	12	12	PERSONNEL-POSTS		47,275	49,855	52,460
					DUTY TRAVEL		3,150	3,300	3,500
					SEMINAR COSTS		-	1,000	1,000
TOTAL		12	9	9	FELLOWSHIPS		9,240	7,965	9,180
FELLOWSHIP MONTHS	PR	12	9	9					

BOLIVIA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purpose of this project is to cooperate with the Government in studying the country's health problems and resources with the aim of identifying priority program areas and planning activities directed to progressive improvement of health conditions.

TOTAL		30	36	36	TOTAL	PR	111,000	127,020	133,835
P-5 PAHC/WHO REPRESENTATIVE 4.3045	PR	12	12	12	PERSONNEL-POSTS		68,450	82,350	86,885
P-1 ADMINISTRATIVE OFFICER 4.4710	PR	6	12	12	DUTY TRAVEL		3,150	3,300	3,500
G-5 SECRETARY 4.4275	PR	12	12	12	COMMON SERVICES		39,400	41,370	43,450

BOLIVIA-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to assist the Government in the application of sound management principles and techniques to the public health services with a view to a gradual improvement of their effectiveness.

TOTAL		3	-	1	TOTAL	WR	13,775	4,580	11,015
CONSULTANT MONTHS	WR	3	-	1	PERSONNEL-CONSULTANTS		8,100	-	3,400
					SUPPLIES AND EQUIPMENT		1,055	1,925	1,495
TOTAL		6	3	6	FELLOWSHIPS		4,620	2,655	6,120
FELLOWSHIP MONTHS	WR	6	3	6					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BOLIVIA-5103, DEVELOPMENT OF HEALTH SERVICES IN CHUQUISACA AND TARIJA

The purpose of this project is to develop and carry out a health program with a view to a progressive and rapid increase in the coverage of health services in Chuquisaca and Tarija.

TOTAL		12	12	12	TOTAL	PR	29,465	44,975	47,405
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		26,315	41,675	43,905
.4654					DUTY TRAVEL		3,150	3,300	3,500

BOLIVIA-5200, MEDICAL CARE SERVICES

The purposes of this project are to improve the organization of medical care programs, increase their coverage in terms of area and population, and improve the skills of their staff, in order to bring the services within the reach of the entire population, particularly marginal groups in urban and rural areas.

TOTAL		12	12	12	TOTAL	PR	29,465	44,975	47,405
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	PERSONNEL-POSTS		26,315	41,675	43,905
.4228					DUTY TRAVEL		3,150	3,300	3,500

BOLIVIA-5400, HEALTH STATISTICS

The specific objectives of this project are to strengthen the National Division of Biostatistics as the body providing leadership and standards in the area of health statistics; improve statistical services of the sanitary units in generating regional statistics and the national statistical services of the decentralized public institutions; improve filing and statistical services of institutions throughout the country; upgrade coordination between national agencies responsible for producing vital and health statistics; and set up a national program for the instruction and training of personnel in health statistics and medical records.

TOTAL		12	12	12	TOTAL	PR	41,575	38,840	40,995
P-3 STATISTICIAN	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.3227					DUTY TRAVEL		3,150	3,300	3,500
					SEMINAR COSTS		2,000	-	-
					SUPPLIES AND EQUIPMENT		500	-	-
					FELLOWSHIPS		2,310	-	-
TOTAL		3	-	-					
FELLOWSHIP MONTHS	PR	3	-	-					

BOLIVIA-5500, MANAGEMENT OF HEALTH SERVICES

The main purpose of this project is to rationalize and strengthen the administrative infrastructure of the health sector so that it will support the programs and make it possible to provide effective community health services. The goals of the project are to establish a coordinated, functional structure for the health services system that make it possible to provide health care for the maximum number of people; to establish management systems to provide effective support for health services activities; to facilitate the formation of health services programs in order to stimulate activities in the health sector; to educate and train personnel so as to improve the administrative capability of the services; and to strengthen the tools of the sector responsible for the administrative development process.

TOTAL		12	12	12	TOTAL	PR	54,645	56,130	61,825
P-4 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.0958					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		3,150	3,300	3,500
TOTAL		2	2	2	FELLOWSHIPS		4,620	2,655	6,120
					COURSE COSTS		2,000	2,500	1,500
CONSULTANT MONTHS	PR	2	2	2					
TOTAL		6	3	6					
FELLOWSHIP MONTHS	PR	6	3	6					

BOLIVIA-6100, SCHOOL OF PUBLIC HEALTH

The purposes of this project are to improve the organization and functional structure of the School of Public Health and provide training to its faculty; identify the areas and levels with the largest shortages of qualified health personnel; and gradually train the largest possible number of health workers at the various levels for a program allowing the best possible use of available staff.

TOTAL	WR	12,200	10,200	9,200
SEMINAR COSTS		1,000	1,000	-
SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
GRANTS		2,000	-	-
COURSE COSTS		8,200	8,200	8,200

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

BOLIVIA-6200, MEDICAL EDUCATION

Medical education in the country is in a process of transformation in compliance with the new education law that creates health science faculties and establishes administrative reorganization of university departments.

The purposes of this project are to cooperate in the implementation of the new administrative structure; to revise the curricula for professionals in the health sciences; to improve teaching in medical schools by providing adequate training for teachers; and to cooperate with faculties of health sciences and other institutions so as to adapt educational programs to the activities of the health sector.

TOTAL		1	1	1	TOTAL	WR	8,820	7,155	11,020
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		6	3	6	SEMINAR COSTS		1,500	1,500	1,500
FELLOWSHIP MONTHS	WR	6	3	6	FELLOWSHIPS		4,620	2,655	6,120

BOLIVIA-6300, NURSING EDUCATION

The purposes of this project are to cooperate with the Government, the universities, and the nursing schools in the improvement of nursing education by adjusting curricula to the country's requirements; to increase the number of nurses and auxiliaries so as to improve the quality of the care provided; and to expand coverage of the services in rural areas and marginal urban areas.

TOTAL		9	9	11	TOTAL	WR	9,130	8,965	12,000
FELLOWSHIP MONTHS	WR	9	9	11	SEMINAR COSTS		2,200	-	-
					SUPPLIES AND EQUIPMENT		-	1,000	780
					FELLOWSHIPS		6,930	7,965	11,220

BOLIVIA-6400, SANITARY ENGINEERING EDUCATION

The purpose of this project is to increase and improve training in sanitary engineering for professional, intermediate and support staff. This will be accomplished through fellowships and specialized courses abroad for engineers and courses at the local level for technical and support staff.

TOTAL		11	6	11	TOTAL	WR	14,470	11,310	17,220
FELLOWSHIP MONTHS	WR	11	6	11	SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
					FELLOWSHIPS		8,470	5,310	11,220
					COURSE COSTS		5,000	5,000	5,000

BOLIVIA-6500, VETERINARY MEDICINE EDUCATION

Gabriel René Moreno University in Santa Cruz is the only one in the country that offers a full career in veterinary medicine. It is suffering from a shortage of trained teaching staff and teaching materials, and does not have modern educational systems.

The purposes of this project are to provide advice on the improvement of the curriculum of the School of Veterinary Medicine, the teaching facilities and laboratory capacity, and to train the kind of professionals required for the agricultural development of the country.

TOTAL		6	3	3	TOTAL	WR	5,620	4,155	4,560
FELLOWSHIP MONTHS	WR	6	3	3	SUPPLIES AND EQUIPMENT		1,000	1,500	1,500
					FELLOWSHIPS		4,620	2,655	3,060

BOLIVIA-6600, DENTAL EDUCATION

This project provides assistance in the improvement of dental education programs at schools of the health sciences; in the revision of curricula; in the training of faculty personnel; and in promoting the use of simplified dental equipment in rural areas.

TOTAL		-	1	1	TOTAL	WR	2,310	3,000	3,400
CONSULTANT MONTHS	WR	-	1	1	PERSONNEL-CONSULTANTS		-	3,000	3,400
TOTAL		3	-	-	FELLOWSHIPS		2,310	-	-
FELLOWSHIP MONTHS	WR	3	-	-					

BRAZIL

The Federal Republic of Brazil, with an area of 8,511,965 square kilometers, has a population (1977 estimate) of 113,208,500. Of this total, 69,457,600 (61.35%) live in urban areas and 43,750,900 (38.65%) in rural zones. The change in population distribution is the consequence of the high rate of social, economic and cultural development that has taken place in the country over recent years.

Concern for the well-being of the individual is a constant factor in all governmental actions. The importance accorded to social policy by the Government is reflected in the high level of financial resources directed to this area. Within this framework, substantial changes in structural and operational aspects of the health sector have been effected as a result of the law establishing the National Health System.

This System is gradually being installed, in an atmosphere of cooperation among its various components. Definition of institutional fields has made it possible to introduce procedures designed to promote integration of the sector, through coordination mechanisms that are capable of bringing about improvements in the yield and efficacy of health activities.

The National Health System is composed of a number of subsystems, encompassing all of the programs for collective health, individual health (medical care), environmental sanitation, housing, etc. It represents a most progressive and objective step toward integration of structures and services, in order to provide balanced health services throughout the country, since its central organ is the Social Development Council, chaired by the President of the Republic.

Multidisciplinary programming and executive responsibilities are defined and fixed, and the Ministry of Health, as the basic regulatory agency, also has responsibility for the major vertical programs: communicable disease control, food and nutrition policy, and the National Immunization Program. General social welfare services are turned over to the Ministry of Social Security and Welfare; the major sanitation works to the Ministry of the Interior; manpower training to the Ministry of Education and Culture; and occupational hygiene and safety to the Ministry of Labor.

States and municipalities are to develop decentralized programs, mainly those of an operational nature, having primary responsibility for installation, coordination and integration of basic health services. Further, with a view to regulation of the System, the following activities are being emphasized:

- Regulation by legislation, with laws that establish the National Epidemiological Surveillance System, Compulsory Notification of Diseases and the National Immunization Program. The studies made will constitute the detailed legal instrument in developing epidemiological surveillance activities, primarily as they relate to incorporation into the national system of the subsystems set up in the federated units, working through the specific epidemiological agencies operating in this field, in their respective structures.
- Transfer to the Ministry of Health of activities related to the sanitary control of mineral waters that, given the interpretation of the law in effect prior to the creation of the National Health System, have continued to operate under the Ministry of Mining and Energy;
- Establishment of regulations setting potable water quality standards;
- Institutional reorganization of the Comissão Nacional de Normas e Padroes para Alimentos (CENIPA)
- Redrafting legislation to control bloodbank activities in the country;
- Preparation of draft legislation for the quality control of medicaments, drugs, pharmaceutical and related supplies, and health and dietetic products, from the time of registration, through the labeling, packaging and advertising, to the transportation means to be employed;
- Continuation of the studies aimed at changing the organizational and institutional aspects of the Ministry, pursuant to an agreement concluded between the Ministry of Health and the Secretaria de Modernização Administrativa/Secretaria de Planejamento da Presidência da República (SEMOR/SEPLAN), designed to incorporate the new functions assigned to the Ministry under the law setting up the National Health System. Such studies are a part of an integrated institutional development program that affects not only the Ministry of Health itself but envisages technical support for modernization of the health departments in the federated units.

Action by the Ministry of Health will have an impact in the following areas:

1. Epidemiological Surveillance

The objective is the orderly development of all epidemiological surveillance activities in the country, through two projects carried out at the national level: the Epidemiological Surveillance Network Units, with activities directed at streamlining the system for notification and control of communicable diseases, especially those preventable by vaccination; and the Public Health Laboratories Network, that will support the epidemiological surveillance work, providing confirmation of clinical diagnosis of the communicable diseases subject to control.

2. Communicable Diseases

The goal is control of diseases that are preventable by vaccination and control and/or eradication of the major endemic diseases prevalent in the country. The Ministry acts through the following eight specific projects:

- (i) The National Immunization Program, designed to increase the immunity level of the population throughout the national territory by vaccinating the most vulnerable population groups against diseases such as measles, poliomyelitis, smallpox, tuberculosis, tetanus, diphtheria and whooping cough.
- (ii) Plague control, which is developed through work in the enzootic zones, that is, some 200,000 square kilometers, in 218 municipalities and 18 States of the Republic. The prevalence of human cases, largely rural, confirms the fact that the plague foci are in that zone, as a consequence of the rat-flea binomial that sustains the endemic character of the disease. Control activities are concentrated in certain areas of the States of Ceará, Pernambuco and Bahia, as well as in Rio Grande do Norte, Paraíba, Alagoas, Minas Gerais and Rio de Janeiro. The project envisages specific treatment of individual patients, chemoprophylaxis for their contacts, extermination of rats and fleas in dwellings, and health education.
- (iii) The yellow fever project, which is designed to control this zoonosis through surveillance against reintroduction of *Aedes aegypti* into the country, vaccination of the population at risk against the disease, and utilization of viscerotomy (post-mortem liver examination) to confirm diagnosis of human cases.
- (iv) Malaria control, in which it is proposed to eradicate the disease throughout the national territory. Of the 43.3 million inhabitants of the originally malarious zones, 12.7 million are still found in areas of active transmission and 30.6 million in areas under surveillance (with interrupted transmission).
- (v) Schistosomiasis control: This project envisages nationwide control of the disease, reducing transmission to low levels so that it does not impede the processes of development in the country. The following are considered among the specific objectives of the project:
 - (a) reduction in the number of schistosomiasis carriers through intensive detection and treatment of infected individuals;
 - (b) stimulation of community action, so that a favorable attitude is adopted toward preventive measures, by means of health education activities at an appropriate level;
 - (c) control of the snail population in breeding places of the most epidemiological importance, to prevent reestablishment of transmission until such time as the bulk of *S. mansoni* carriers can be eliminated;

(d) prevention, by prophylactic measures, of the spread of endemic diseases through irrigation, hydroelectric and related works connected with national development; and

(e) prevention of the spread of the endemic disease to areas as yet free of the infection.

The following targets have been set up for the project:

- Perform 14 million laboratory examinations;

- Administer 12 million treatments to S. mansonii carriers and their households;

- Carry out research studies on the intermediate snail hosts of schistosomiasis in approximately 2,000 Brazilian municipalities, estimating the necessary application of molluscicides in all positive breeding places in these municipalities. To attain these goals it will be necessary to employ more than 4,000 field workers over the period 1976-1979 and to train 1,400 laboratory workers, 470 laboratory auxiliaries and 2,000 guards. The latter will be responsible for the performance of varied tasks, such as collection of material for diagnosis or treatment control (feces examinations); snail research (malacology) and application of molluscicides in the infected breeding places; and administration of treatment (medical guards), etcetera.

(vi) Chagas' disease is currently a major public health problem because of its vast geographic distribution and high prevalence. Originally a zoonosis of wild animals, Chagas' disease has become a problem of human pathology as a result of the adaptation of the insect vectors of the disease (the "Barbeiro" or triatomid) to the environment of human dwellings in rural areas where the structures are substandard and without plastered walls. Implementation of this project involves the following steps:

(a) geographic survey of the chagasic area in order to inventory all dwellings and outbuildings;

(b) entomological survey to determine the infestation indices of such structures and the natural infection indices of the Trypanosoma cruzi vectors;

(c) selective eradication treatment to eliminate the vector from all dwellings and outbuildings found to be infested; and

(d) entomological evaluation, following the first treatment and repeating the eradication in structures that are still found to be infested.

(vii) Hansen's Disease: This endemic disease is irregularly distributed throughout the country, and constitutes one of the most serious public health problems, in view of its grave economic and social consequences. It is not only a highly incapacitating disease, with diagnosis unfortunately only possible in the most productive periods of an individual's life (15 to 50 years) but, more importantly, the community tends to reject its victims and contacts as a result of traditional social tabus.

Over recent years, with medical care limited to the known demand, a situation has developed where there is a plateau in the state of the disease; prevalence, 1.3 per 1,000 population, has remained stationary since 1959.

The Ministry of Health is aware of the gravity of the problem and is seeking to activate control of the disease, encouraging the health services to incorporate in their routine work an intensive case detection program aimed at early diagnosis and consequent prompt treatment of its evolution toward the polar forms of the disease. Such changes in the framework of the health services should bring about a decline in the morbidity rate.

(viii) Tuberculosis: Under the organization of the health services system in Brazil, this project has as its objective a gradual reduction in the epidemiological indices of this disease by 1979.

In 1973 tuberculosis accounted for 12.9% of the mortality from communicable diseases and nearly 5% of total deaths. From 1971 to 1973 reductions were recorded in the mortality rate that had only been anticipated for the end of the decade. For example, the rate per 100,000 population in the Northern Region fell from 41.5 to 31.9 (1980 projection, 30.4); in the Northeast, from 40.1 to 33.2 (1980 projection, 28.9); in the Southeast, from 18.7 to 18.6 (1980 projection, 12.6); in the South, from 33.5 to 18.8 (1980 projection, 24.6); in the West Central, from 17.5 to 16.3 (1980 projection, 12.2).

In 1940 the mortality rate was 284.6 per 100,000 population, which was reduced by 1973 to 22.7.

The National Tuberculosis Division (DNT) is the coordinating and directing agency in the fight against tuberculosis in the country, in addition to directly administering nine hospitals and three specialized outpatient clinics. Including these units of DNT, there are 256 specialized dispensaries, four of which are operated by the Fundação Serviços de Saúde Pública (FSESP) and 580 general health units, 161 operated by FSESP, now carrying on antituberculosis activities in the country, in addition to 134 hospitals with approximately 20,000 available beds. These activities include case notification, confirmation of diagnosis, registration, treatment and control of patients, control of their contacts, and protection of the healthy by vaccination.

3. Food and Nutrition

In the field of nutrition, as provided in the Second National Development Plan, the National Food and Nutrition Program (PRONAN) was established, with the goal of reducing the level of absolute poverty now affecting significant groups of the population. PRONAN carries on the following projects and programs for this purpose:

(i) supplementary feeding program, including (a) care for pregnant and nursing mothers, and children under 6 years of age; and (b) school food programs for the 7-14-year age group and for preschool children;

(ii) program of aid to the small producer;

(iii) program of support activities;

(iv) incentive mechanisms for food for the worker programs.

The Advisory Council of the National Food and Nutrition Institute will coordinate, oversee, evaluate and control the work of PRONAN, which will be developed with the cooperation of the Ministries of Health; Social Security and Welfare, Labor, Education and Culture, and Agriculture. The following directives have been established for PRONAN:

(i) rationalize assistance and education in the area of food and nutrition;

(ii) promote production, storage, transportation and marketing of essential basic foods for the official supplemental food programs, especially by means of financial, tax and marketing incentives for small cooperatives;

(iii) attack nutritional deficiencies in the population, with emphasis on preventive measures;

(iv) provide incentives for study and research to improve standards and conditions of diet and nutrition;

(v) support manpower training for technical services in the food and nutrition field;

(vi) expand the food program for the worker by providing financing and incentives to private businesses and institutions of employers and employees;

(vii) organize an integrated system for acquisition, warehousing and distribution of foods destined to the supplementary food program.

4. Scientific and Technical Research

In the area of scientific and technical research, the Ministry of Health, through agencies under its direction, the Fundação Oswaldo Cruz (FOC) and FSESP, accords priority attention to studies related to the major diseases endemic in rural areas and to Hansen's disease, as well as to work developed by the Evandro Chagas Institute, FSESP, in the Amazon Basin, especially its work on the arboviruses.

Research in the area of the rural endemic diseases - schistosomiasis, Chagas' disease, leishmaniasis and Hansen's disease - is directed at the development of methodology and techniques suitable for the control, prevention and epidemiological surveillance of these diseases.

The research work in tropical diseases in the Amazon Basin includes studies in such fields as: the arboviruses, the Altamira hemorrhagic syndrome, viral diseases in Belem and in other areas of Amazonia, parasitoses, and other research in bacteriology and microbiology.

5. Delivery of Medical and Welfare Services

Activities for the delivery of medical and welfare services in Brazil are basically financed by the social security systems. The Ministry of Social Security and Welfare is the major source of financing for these activities, since it has responsibility for health activities aimed primarily at the provision of medical care for the individual (Law No. 6229 setting up the National Health System), acquiring approximately 80% of the services it renders from private entities.

Apart from its action role as the agency coordinating, establishing guidelines and financing activities performed by third parties, especially the state departments of health, the Ministry of Health (through FSESP, which supports the state governments) directly programs investment of funds for the expansion and extension of medical care and welfare services in strategic areas and in areas of economic development.

At the present time there are five important projects under way in this area:

(i) The Basic Network of Medical-Welfare Care which, through the installation of an "integrated health care system," is designed to provide minimum health care services to rural populations in Caruaru (PE) and Montes Claros (MG) and through the "expansion of health services in areas of economic development" is designed to expand, improve, construct and install health units for the ongoing delivery of health care services to populations located in strategic areas and areas of economic development, is complementing the medical-welfare activities in these priority areas.

(ii) Extension of health care services to regions lacking them originated in the project for the internal development of health activities in the Ministry of Health. With approval of the Program for the Internal Development of Health and Sanitation Activities, participation by the Department of Planning in the Office of the President of the Republic, by the Ministry of Social Security and Welfare, and by the Ministry of the Interior, was expanded and incorporated in the action area of these services.

The objectives of this program are to install a basic public health structure in communities with populations of 20,000 and under, and to help improve the health level of such populations.

Under the guidelines established, the program will develop basic health activities characterized by low-cost/high-efficiency, utilizing personnel at the auxiliary level recruited in the same areas. Within its action area, prevention of communicable diseases that are responsible for the existing significant mortality rates will be the prime target. Distribution of the health units of the "mini-post" type will be achieved by integrating them into the health system structure of the region, providing the support of more complex units located in strategic centers. This program will be carried out with broad-based community participation.

(iii) Protection and health care activities to benefit the mother and child are being developed with the joint participation of the states, municipalities and private institutions. At the federal level, the Ministry of Social Security and Welfare, through the Instituto Nacional de Previdência Social, and the Ministry of Health, through FSESP, are the responsible agencies for the delivery of medical and health care to children and pregnant and nursing mothers. Coordination of standards and financing of the maternal and child welfare services at the national level are the responsibility of the Maternal and Child Welfare Coordination and Protection Service of the Ministry of Health, with program execution at the state level under the state departments of health.

(iv) Mental health services are supported in specialized outpatient clinics and hospitals, under the Ministry of Health, and in state and private agencies that are now connected with the health system and the social security systems.

This program is designed to promote primary and secondary preventive activities so as to reduce the number of mentally ill, providing early diagnosis and appropriate treatment to the mentally disturbed patients.

The welfare subsystem continues to be based on hospital care in institutions, which has a reduced cost/benefit ratio, but efforts are being made to change this methodology. The Ministry of Health has now developed a definitive action policy, in process of implementation, against the treatment of patients in hospitals, especially the specialized hospitals, and is promoting outpatient care rather than the institutionalized or semi-institutionalized method.

(v) The campaign to fight cancer is being encouraged through improvements in early diagnosis techniques, for which the Ministry of Health, through its National Cancer Division, is establishing guidelines. The National Cancer Institute serves as the center for the training program.

The program is being developed with a systematic emphasis on integrated programming of all institutions, official or private, that are currently working, or that will eventually undertake activities, to combat this disease. This policy is oriented toward primary prevention, eliminating carcinogenic factors, secondary prevention by case detection and early diagnosis, and by a third line of prevention, the effective application of therapeutic methods and utilization of rehabilitation techniques.

6. Manpower Training

Manpower training in the health area is directed by FOC, through the Escola Nacional de Saúde Pública (ENSP) and FSESP.

ENSP, in the Ministry of Health, is the specific manpower agency for the health sector. Its activities are directed at the preparation of personnel at the higher levels, in cooperation with the various programs of the Ministry, and provision of advanced training for professional staff in those areas where the pool of trained health personnel is inadequate or insufficient. For effective planning and achievement of its objectives, it maintains a continuing system of analysis for the inventory and geographic distribution of human resources for the health sector.

FSESP carries on training and specialization programs in certain action areas, providing qualified staff for the operational organizations that have responsibility for health and sanitation activities.

Evidence of deficiencies in the area of human resources for the health services led the Ministry of Health, in cooperation with the Ministry of Education and Culture and PAHO/WHO, to prepare the Program for Strategic Health Manpower Training, designed to bring about the gradual harmonization of health manpower resources with requirements of a health services system, providing maximum possible coverage, regionalization and progressive care, according to the needs of the respective populations and the realistic capabilities presented by the diverse situations in the country.

7. Administrative Modernization

To carry out the administrative modernization activities, SEMOR, in the Planning Department of the Office of the President, promotes studies, under its agreements with the several ministries, covering institutional, organizational and operational aspects of the sector that will lead to definition or redefinition of functions, activities and goals.

SEMPOR develops its activities under its agreement with the Ministry of Health, through structural-functional diagnosis, studies on activities, managerial and executive philosophy and values at the directing and operational level, and studies on the relationships between the Ministry and its clients.

In its turn, the Ministry is developing two important projects in the information area, recognizing that the information system in its present form is not adequate to provide knowledge of various aspects in the health sector, and that such knowledge is essential to realistic planning. These are (i) a project for the installation of a national health information system designed to rationalize the processes of guidance, separation, evaluation and control in the administrative and planning areas by the operation of such a system; and (ii) a project to set up a computerized data processing center that will enable the Ministry of Health to perform its duties more efficiently by collecting, tabulating and analyzing epidemiological and strategic information, and thus make it possible to achieve a more orderly control of the personnel, property, accounting and material subsystems.

8. Sanitation Services

Sanitation activities in Brazil are the responsibility of the National Environmental Sanitation Plan. The objectives of this program are to provide safe drinking water to 80% of the urban population in 80% of the cities by 1980; sanitary sewerage systems to the metropolitan areas as well as to the state capitals and the more important cities; and more simplified sanitary services to the smaller cities and towns.

The Ministry of Health, working through FSESP and in consideration of the existing shortfall of such services in the country, specifically in rural areas or in urban areas with predominantly rural characteristics, is developing a range of projects designed to provide such communities with safe drinking water supply and human waste disposal facilities. It is hoped by these means to raise the general health level in the country by interrupting the transmission cycle for the most prevalent diseases affecting these areas.

The following important projects being initiated in this area are:

(i) basic sanitation in rural areas, aimed at reducing the prevalence of diseases in those areas, by developing sanitation activities in 18 units of the Republic, reaching 173 municipalities, designed to increase life expectancy and contribute to enhance social and economic conditions for the area residents;

(ii) basic sanitation in areas of economic development, designed to provide water supply systems and other residential sanitation improvements for localities in the area of influence of the national highway network in Amazonia, as well as in the Upper Solimões (AM), Jaguaribe (CE) and São Francisco (BA), in harmony with other projects for social and economic development carried on by other government sectors;

(iii) National Water Quality Program, now in progress, for the standardization of water quality for public consumption and its fluoridation in 132 cities with populations over 50,000, with benefits to a total population of 28.3 million by 1979; and

(iv) basic sanitation program for areas of endemic schistosomiasis, with a primary objective of control of this disease in the country, utilizing specific treatment of the infected individuals and complementing such treatment by intensive health education and the application of snail eradication measures.

In areas included in the basic sanitation program of the Ministry of Health through FSESP, the work of the Superintendência de Campanhas de Saúde Pública will supplement this activity with specific treatment and the snail eradication campaign.

The project executed by FSESP, initiated in 1975, envisages the construction by 1979 of 734 small water supply systems, 232,250 construction works for improvements to school sanitary facilities and 765 community facilities such as laundries, public water fountains, public baths and sanitary latrines. Initially concentrated in Alagoas, the project was extended to Sergipe, Pernambuco, Paraíba and Rio Grande do Norte, and is yet to be initiated in Ceará and Maranhão.

The goals of the Pilot Project for Schistosomiasis Control include treatment of 12 million carriers of *S. mansoni* and their households, performing approximately 14 million feces examinations (coproscopies) to identify cases. Local snail eradication measures will be taken in 2,000 municipalities. More than 4,000 field workers (laboratory technicians, laboratory and surveillance auxiliary workers) will be utilized in the project.

The project is intended to cover the entire country and its action area was gradually increased in the second half of 1976 so as to reach all of the States by the end of 1979. Priority will be accorded to areas having hydroelectric and irrigation projects, given the favorable conditions such areas offer for the spread of this endemic disease. Special attention will be given to the Northeast Region in which there is the largest group of infected persons in proportion to the total population and where the more serious forms of the disease are most often found.

Apart from the activities discussed, others of significant impact in the health sector may also be cited.

Intensive work is being done to control traffic and consumption of narcotic, psychotropic, teratogenic and other drugs that produce dependency or other undesirable effects, according to the amounts used or when used contrary to the specified prescription. The Ministry of Health is taking vigorous action in this regard and is coordinating the work of other governmental agencies, through the various joint councils and committees, as well as through legislative and regulatory actions.

Mention should be made here of CNNPA, a working group responsible for the preparation of standards for enriched dietetic foods, as well as microbiological standards for foods used for infant feeding. CNNPA has already promulgated a large number of standards that have been approved by the Government.

Food testing is being performed in competent accredited laboratories in six of the federated units.

The Ministry of Health is taking vigorous measures to control the sale of human blood, even though the donation and use of blood are controlled by regulations. Draft laws being prepared to redefine the problem are aimed at meeting the needs in the country while at the same time protecting the health of donors.

Regional health agencies are being developed in each of the macroregions into which the country is divided: the North, Northeast, West Central, Southeast and South. Given the continental extent of the country, it is not feasible to devise a valid health program for the Southern Region that will at the same time be applicable in the Northeast and North; hence it is planned to develop health action programs consonant with the special problems of each region, and, accordingly, the National Health Plan will have to be integrated into these regional plans.

In conclusion, the Ministry of Health, in consonance with the governmental policy of enhancing the well-being of the individual, continues to exert major efforts to stimulate health activities through structural reforms, with the resultant increase in managerial capability, decentralized operations and use of the appropriate technological advances in solving the health problems of its people.

BRAZIL
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	3,733,794	56.1	2,177,585	55.5	2,180,409	59.6
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SERVICES TO INDIVIDUALS	464,615	7.0	496,765	12.6	519,095	14.2
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COMMUNICABLE DISEASES						
0200 MALARIA	260,740	3.9	272,515	6.9	283,930	7.8
0400 TUBERCULOSIS	12,720	.2	14,310	.4	16,320	.4
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	79,025	1.2	87,280	2.2	89,035	2.4
1400 NUTRITION	112,130	1.7	122,660	3.1	129,810	3.6
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ENVIRONMENTAL HEALTH SERVICES	2,377,654	35.7	1,130,460	28.9	1,079,529	29.5
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	629,091	9.4	258,180	5.6	275,490	7.5
2100 WATER SUPPLY AND EXCRETA DISPOSAL	660,000	9.9	76,800	2.0	-	-
ENVIRONMENTAL POLLUTION						
2300 PROGRAM PLANNING AND GENERAL ACTIVITIES	225,600	3.4	38,016	1.0	-	-
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	490,267	7.4	304,779	7.8	319,414	8.7
3200 FOOT-AND-MOUTH DISEASE	297,616	4.5	-	-	-	-
3700 ZOOSES	41,915	.6	44,875	1.1	47,015	1.3
3600 QUALITY CONTROL OF DRUGS	33,165	.5	407,810	10.4	437,610	12.0
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COMPLEMENTARY SERVICES	891,525	13.4	550,360	14.0	581,795	15.9
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4100 NURSING	234,120	3.5	158,810	4.0	176,210	4.8
4200 LABORATORIES	10,800	.2	12,000	.3	13,600	.4
4300 EPIDEMIOLOGICAL SURVEILLANCE	533,600	8.0	253,730	6.5	253,455	6.9
4400 HEALTH EDUCATION	79,105	1.2	87,270	2.2	94,320	2.6
4500 REHABILITATION	33,900	.5	38,550	1.0	44,200	1.2
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II. DEVELOPMENT OF THE INFRASTRUCTURE	2,928,068	43.9	1,749,981	44.5	1,473,560	40.4
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HEALTH SYSTEMS	2,323,597	34.9	1,194,440	30.5	1,270,060	34.8
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	373,875	5.6	391,725	10.0	410,735	11.2
5100 GENERAL PUBLIC HEALTH SYSTEMS	1,657,702	24.9	486,465	12.4	522,985	14.4
5200 MEDICAL CARE SYSTEMS	39,475	.6	41,675	1.1	43,905	1.2
5400 STATISTICS AND INFORMATION SYSTEMS	213,070	3.2	232,900	5.9	248,530	6.8
5500 MANAGEMENT SYSTEMS	39,475	.6	41,675	1.1	43,905	1.2
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DEVELOPMENT OF HUMAN RESOURCES	492,571	7.4	431,551	10.9	68,910	1.9
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6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	431,841	6.5	393,686	10.0	29,130	.8
6600 DENTISTRY	40,330	.6	16,865	.4	18,980	.5
6900 OTHER	20,400	.3	21,000	.5	20,800	.6
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TECHNOLOGICAL RESOURCES	111,900	1.6	123,990	3.1	134,590	3.7
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TEXTBOOKS AND OTHER TEACHING MATERIALS						
8100 MEDICAL TEXTBOOKS	35,365	.5	37,155	.9	39,795	1.1
8700 OTHER TECHNOLOGICAL RESOURCES	76,535	1.1	86,835	2.2	94,795	2.6
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GRAND TOTAL	6,661,862	100.0	3,927,566	100.0	3,653,969	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
1977												
PAHC---PR	1,654,670	264	348	25	1,185,985	94,710	141	108,570	24,440	66,515	-	174,450
PW	924,301	156	48	28	596,500	53,000	19	14,400	15,000	110,401	-	135,000
PG	2,672,980	192	140	118	1,159,156	73,130	878	614,485	28,844	213,126	-	584,237
PH	96,966	12	12	-	32,365	3,000	-	-	-	61,601	-	-
WHO---WR	962,045	180	48	48	749,910	103,345	77	59,290	3,000	6,500	40,000	-
UNDP	350,900	18	6	35	202,200	3,475	68	76,998	-	10,477	-	57,750
TOTAL	6,661,862	822	602	254	3,926,116	330,660	1203	873,743	71,284	468,622	40,000	951,437
PCT. OF TOTAL	100.0				58.9	5.0		13.1	1.1	7.0	.6	14.3
1978												
PAHC---PR	1,902,520	264	348	36	1,332,350	126,895	166	146,910	24,000	71,865	25,000	175,500
PW	76,800	144	48	-	59,204	-	-	-	-	-	-	17,596
PG	511,405	84	96	9	386,225	40,059	52	41,480	15,000	15,612	-	13,029
PH	37,155	12	12	-	34,155	3,000	-	-	-	-	-	-
WHO---WR	968,060	180	48	39	800,090	98,950	52	46,020	3,000	5,000	15,000	-
UNDP	431,626	48	-	7	256,000	6,000	54	48,016	-	93,800	-	27,610
TOTAL	3,927,566	732	552	91	2,868,024	274,904	324	282,426	42,000	186,277	40,000	233,935
PCT. OF TOTAL	100.0				73.1	7.0		7.2	1.1	4.7	1.0	5.9
1979												
PAHC---PR	2,052,315	264	348	48	1,456,695	127,780	166	169,320	18,830	74,440	24,000	181,250
PG	159,744	12	24	2	83,267	15,000	43	38,360	10,000	13,117	-	-
PH	39,795	12	12	-	36,295	3,500	-	-	-	-	-	-
WHO---WR	996,205	180	48	26	821,770	99,395	52	53,040	3,000	5,000	14,000	-
UNDP	405,910	48	-	9	292,020	4,500	19	19,420	-	58,200	-	31,770
TOTAL	3,653,969	516	432	85	2,690,047	250,175	280	280,140	31,830	150,757	38,000	213,020
PCT. OF TOTAL	100.0				73.6	6.9		7.7	.9	4.1	1.0	5.8

PAHC-PR-REGULAR BUDGET

PW-COMMUNITY WATER SUPPLY

PA-INCAP - REGULAR BUDGET

PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS

PG-GRANTS AND OTHER CONTRIBUTIONS

PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHC-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND

PJ-GRANTS RELATED TO CAREC

WHO--WR-REGULAR BUDGET

UNDP-UNITED NATIONS DEVELOPMENT PROGRAM

UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES

WO-GRANTS AND OTHER FUNDS

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

BRAZIL - DETAIL

BRAZIL-0200, MALARIA ERADICATION

The malarious area constitutes 81.3% of the country and includes 40.0% of the total population. The campaign has managed to interrupt the transmission of the disease in areas including 70.7% of the malarious population. It is predicted that by the end of 1978 the benefits will be extended to 39 million people. Expectations are that by 1980 there will be only a few foci of transmission in the Amazon Region.

TOTAL		60	60	60	TOTAL	PR	260,740	272,515	263,930
P-5 MEDICAL OFFICER	PR	24	24	24	PERSONNEL-POSTS		185,630	196,040	206,620
.0353 .3206					DUTY TRAVEL		14,450	15,000	15,250
P-4 PARASITOLOGIST	PR	12	12	12	SUPPLIES AND EQUIPMENT		56,040	56,165	55,940
.0816					FELLOWSHIPS		4,620	5,310	6,120
P-4 SANITARY ENGINEER	PR	12	12	12					
.0355									
G-6 SECRETARY	PR	12	12	12					
.3109									
TOTAL		6	6	6					
FELLOWSHIP MONTHS	PR	6	6	6					

BRAZIL-0400, TUBERCULOSIS CONTROL

The purposes of this project are to reduce the risks of infection and disease and its annual mortality by 10% by 1980; to implement bacteriological diagnosis and the production of intradermal BCG vaccine for the immunization of not less than 80% of the population under 15 years of age; to expand the active search for new cases of tuberculosis among persons with respiratory symptoms and treat them in accordance with established norms; to make provisions for sputum examinations in 80% of the municipalities that have regular medical care services; and to discourage and gradually reduce sanatorium treatment. The program is in the implementation phase, with agreements signed for its execution in the 26 Federal Units of the country.

TOTAL		3	3	3	TOTAL	WR	12,720	14,310	16,320
CONSULTANT MONTHS	WR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		6	6	6	FELLOWSHIPS		4,620	5,310	6,120
FELLOWSHIP MONTHS	WR	6	6	6					

BRAZIL-1301, MATERNAL AND CHILD HEALTH

The objective of this project is to expand maternal and child health care programs by progressively extending coverage in order to reduce morbidity and mortality rates for this group as proposed in the III Special Meeting of Ministers of Health of the Americas.

TOTAL		12	12	12	TOTAL	PR	79,025	87,280	89,035
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.4599					PERSONNEL-CONSULTANTS		13,500	18,000	17,000
TOTAL		5	6	5	DUTY TRAVEL		5,000	5,330	5,500
CONSULTANT MONTHS	PR	5	6	5	SEMINAR COSTS		9,500	9,000	7,330
TOTAL		15	15	15	FELLOWSHIPS		11,550	13,275	15,300
FELLOWSHIP MONTHS	PR	15	15	15					

BRAZIL-1400, NUTRITION

Protein-calorie malnutrition in children, nutritional anemias and dental caries are nutritional deficiency diseases prevalent in all regions of the country; hypovitaminosis A and endemic goiter are limited to certain areas. The purpose of this project is to assist the Instituto Nacional de Alimentación y Nutrición in developing the National Food and Nutrition Program, whose principal aim is to improve the population's food and nutrition conditions and consequently to help raise the levels of health, productivity and economic growth of the country.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	----	----	----		----	-----	-----	-----
							\$	\$	\$
TOTAL		24	24	24	TOTAL	PR	112,130	122,660	125,810
P-4 MEDICAL OFFICER .0962 .4600	PR	24	24	24	PERSONNEL-POSTS		78,950	83,350	87,810
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		17,000	20,920	20,920
TOTAL		2	2	2	FELLOWSHIPS		10,780	12,390	14,280
CONSULTANT MONTHS	PR	2	2	2					
TOTAL		14	14	14					
FELLOWSHIP MONTHS	PR	14	14	14					

BRAZIL-2000, ENVIRONMENTAL SANITATION

The general objective of this project is to promote and develop environmental sanitation programs in conformity with national plans and priorities. The specific objectives are to increase the number of people receiving potable water and sewerage services; to control environmental pollution concurrent with industrial development and urbanization; to fully develop water resources by applying economical mathematical models for water quality; to improve and expand services for the collection and disposal of wastes; and to encourage occupational and food hygiene.

		72	72	72			303,791	258,180	275,490
TOTAL		----	----	----	TOTAL		-----	-----	-----
P-5 SANITARY ENGINEER .0366	PR	12	12	12	SUBTOTAL	PR	84,020	89,345	94,670
P-4 SANITARY ENGINEER 4.0348 4.3414 4.4031	WR	36	36	36	PERSONNEL-POSTS		62,220	65,845	69,570
G-5 SECRETARY .0367	PR	12	12	12	PERSONNEL-CONSULTANTS		10,800	12,000	13,600
G-4 SECRETARY .3664	PR	12	12	12	DUTY TRAVEL		6,000	6,500	6,500
					COURSE COSTS		5,000	5,000	5,000
TOTAL		5	4	4	SUBTOTAL	PR	64,301	-	-
CONSULTANT MONTHS	PR	4	4	4	PERSONNEL-CONSULTANTS		3,500	-	-
CONSULTANT MONTHS	PR	1	-	-	SUPPLIES AND EQUIPMENT		60,801	-	-
TOTAL		11	11	11	SUBTOTAL	WR	155,470	168,835	180,820
FELLOWSHIP MONTHS	WR	11	11	11	PERSONNEL-POSTS		129,000	138,600	149,100
					DUTY TRAVEL		18,000	20,500	20,500
					FELLOWSHIPS		8,470	9,735	11,220

BRAZIL-2040, ENVIRONMENTAL CONTROL PROGRAM IN THE STATE OF RIO DE JANEIRO

The purposes of this project are to accelerate, at a rate compatible with economic and social development, those activities aimed at solving the problems in the State of Rio de Janeiro (Brazil) caused by the unsatisfactory quality of water, air and soil; to contribute to the protection of the health of the population; to prevent the strangulation resulting from the deterioration of water resources in the region; and to reduce social, economic and sanitary problems caused by environmental pollution. Specific objectives include control of water pollution, control of pollution in the Guanabara Bay, the sanitation and recovery of the Rodrigo de Freitas Lagoon, and the study of the exploitation of the Paraíba do Sul River (Funil/Santa Cecilia stretch), as well as the control of air and soil pollution (the sole final disposal of solid wastes).

		12	-	-			UNDP	125,300	-	-
TOTAL		----	----	----	TOTAL		-----	-----	-----	-----
P-5 PROJECT MANAGER 4.4003	UNDP	6	-	-	PERSONNEL-POSTS		24,000	-	-	-
G-6 SECRETARY 4.4151	UNDP	6	-	-	PERSONNEL-CONSULTANTS		26,000	-	-	-
					DUTY TRAVEL		1,875	-	-	-
					CONTRACTUAL SERVICES		30,300	-	-	-
TOTAL		7	-	-	SUPPLIES AND EQUIPMENT		500	-	-	-
CONSULTANT MONTHS	UNDP	7	-	-	FELLOWSHIPS		33,625	-	-	-
					MISCELLANEOUS COSTS		2,000	-	-	-
TOTAL		44	-	-	LOCAL PERSONNEL COSTS		7,000	-	-	-
FELLOWSHIP MONTHS	UNDP	44	-	-						

BRAZIL-2041, ENVIRONMENTAL CONTROL PROGRAM IN THE STATE OF SAO PAULO

The State of São Paulo is one of the most populous and most industrialized in Brazil. Water and air resources are affected by pollution caused by industrial and human activity.

The purpose of the project is to promote the scientific and technological development of the State Basic Sanitation Technology and Environmental Protection Company (CETESB), to enable it to efficiently perform its duties and responsibilities in improving the environment and the health of the inhabitants of São Paulo State. The activities planned include the conduct of applied and scientific research, the development of the human resources of CETESB, and technological development and transfer.

FUND				1977	1978	1979	FUND				1977	1978	1979		
-----				-----	-----	-----	-----				-----	-----	-----		
											\$	\$	\$		
TOTAL					12	-	-	TOTAL				PW	200,000	-	-
-----					-----	-----	-----	-----					-----	-----	-----
P-4	MANAGEMENT ADVISER	PW	.4922	12	-	-	PERSONNEL-POSTS			40,000	-	-			
				PERSONNEL-CONSULTANTS			73,000	-	-						
				DUTY TRAVEL			8,000	-	-						
TOTAL				27	-	-	SEMINAR COSTS			15,000	-	-			
-----				-----	-----	-----	SUPPLIES AND EQUIPMENT			49,600	-	-			
CONSULTANT MONTHS				PW	27	-	-	FELLOWSHIPS			14,400	-	-		
TOTAL					19	-	-								
-----				-----	-----	-----									
FELLOWSHIP MONTHS				PW	19	-	-								

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BRAZIL-2341, ENVIRONMENTAL STUDIES OF LAKE PARANOA

The objectives of this project are to provide data for the formulation of a plan for the recovery of Lake Paranoa and for the subsequent maintenance of the water quality within standards compatible with its use; to establish the bases for maintenance of the water quality of Lake Descoberto within the standards for waters destined for drinking water supplies; and to provide the necessary elements for training personnel in the organizational development required for the implementation of plans and programs, as well as in the administration of projects for the use of soil and water resources with a basic conservationist approach.

PAHO/WHO is providing technical advisory services for increasing basic knowledge of the ecology of the Lake Paranoa and Descoberto basins, especially limnological information, soil types and uses, and water quality of the reservoirs, and for training personnel in ecological research in support of the planning, programming, standardizing, controlling and evaluating of the use of water and soil resources on the basis of conservation.

TOTAL		18	-	-	TOTAL	UNDP	68,000	38,016	-
CONSULTANT MONTHS	UNDP	18	-	-	PERSONNEL-CONSULTANTS		65,600	-	-
TOTAL		-	43	-	DUTY TRAVEL		1,600	-	-
FELLOWSHIP MONTHS	UNDP	-	43	-	FELLOWSHIPS		-	38,016	-
					MISCELLANEOUS COSTS		800	-	-

BRAZIL-3100, VETERINARY PUBLIC HEALTH

The purpose of this project is to control the principal zoonoses, while seeking to establish a technical-administrative structure that will foster the extension of epidemiological control and research programs, the introduction of food hygiene and human resources training programs to help reduce the number of human cases of such diseases, and the reduction of the country's economic losses caused by these zoonoses.

TOTAL		24	24	24	TOTAL	WR	83,375	93,995	105,130
P-4 VETERINARIAN 4.3278	WR	12	12	12	PERSONNEL-POSTS		54,765	58,650	62,880
G-5 SECRETARY 4.3110	WR	12	12	12	PERSONNEL-CONSULTANTS		-	3,000	6,800
TOTAL		-	1	2	DUTY TRAVEL		7,900	8,990	8,990
CONSULTANT MONTHS	WR	-	1	2	SEMINAR COSTS		3,000	3,000	3,000
TOTAL		23	23	23	FELLOWSHIPS		17,710	20,355	23,460
FELLOWSHIP MONTHS	WR	23	23	23					

BRAZIL-3101, NATIONAL PROGRAM FOR RABIES CONTROL

The aim of the National Program for Rabies Control is to curb this disease in the country's urban areas. Its specific objectives are: control of 100% of the persons bitten by animals; vaccination of not less than 60% of the estimated number of dogs in each city; epidemiological surveillance throughout the country (the 26 units); laboratory diagnoses in 19 states; and the establishment of services for the capture of stray animals.

TOTAL		12	12	12	TOTAL	WR	47,400	51,040	54,540
P-4 VETERINARIAN 4.3897	WR	12	12	12	PERSONNEL-POSTS		43,000	46,200	49,700
					DUTY TRAVEL		4,400	4,840	4,840

BRAZIL-3102, NATIONAL INSTITUTE OF ANIMAL HEALTH

The objectives of this project are to collaborate with the National Institute of Animal Health to establish a diagnostic methodology of communicable and parasitic diseases in the laboratory and in the field; to divulge methods on the preparation and control of biological products and direct its production; to establish sanitary inspection techniques of animal food products and perfect laboratory techniques for food control; to develop investigations on new methods of diagnosis and control of zoonoses; to create, at the national level, a center for epidemiological studies with adequate techniques to carry out the coordination and execution of animal health activities, and to train the necessary human resources.

TOTAL		36	36	36	TOTAL	PG	359,492	159,744	155,744
P-4 VETERINARIAN .4543	PG	12	12	12	PERSONNEL-POSTS		64,852	67,515	74,267
G-7 ADMINISTRATIVE ASSISTANT .4545	PG	12	12	12	PERSONNEL-CONSULTANTS		19,081	12,000	9,000
G-5 SECRETARY .4546	PG	12	12	12	DUTY TRAVEL		13,000	14,000	15,000
TOTAL		5	3	2	SEMINAR COSTS		26,871	15,000	10,000
CONSULTANT MONTHS	PG	5	3	2	SUPPLIES AND EQUIPMENT		186,703	9,749	13,117
TOTAL		70	52	43	FELLOWSHIPS		48,985	41,480	38,360
FELLOWSHIP MONTHS	PG	70	52	43					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BRAZIL-3201, TECHNICAL ASSISTANCE AND TRAINING IN FOOT-AND-MOUTH DISEASE

The main objectives of this project are: to activate and enlarge the infrastructure of the National Program against Foot-and-Mouth Disease, with special attention to field activities, planning, epidemiological studies, and evaluation of the results of the first stage of the program; and to develop the capacity and the efficiency of the field and laboratory technical personnel through a training program and special studies conducted at PANAFTOSA and other specialized institutions or universities in Brazil or abroad, as well as in preselected areas where the Foot-and-Mouth Disease Program has been carried out.

Through the program established by this project, about 700 professionals and 3,200 helpers will be trained in different disciplines covering all aspects of the activities to be performed within the National Program against Foot-and-Mouth Disease.

TOTAL		44	-	-	TOTAL	PG	297,616	-	-
G-3 CLERK-TYPIST	PG	33	-	-	PERSONNEL-POSTS		18,000	-	-
.3250 .4447 .4448					PERSONNEL-CONSULTANTS		58,862	-	-
G-2 DRIVER	PG	11	-	-	FELLOWSHIPS		100,000	-	-
.3235					COMMON SERVICES		120,754	-	-
TOTAL		17	-	-					
CONSULTANT MONTHS	PG	17	-	-					
TOTAL		143	-	-					
FELLOWSHIP MONTHS	PG	143	-	-					

BRAZIL-3350, ANIMAL HEALTH PROGRAM IN RIO GRANDE DO SUL

The purpose of this program is to cooperate with the appropriate national and Rio Grande do Sul authorities in the organization, execution and evaluation of the animal health program, with special emphasis on foot-and-mouth disease, brucellosis, rabies and bovine tuberculosis, as well as personnel training.

TOTAL		12	12	12	TOTAL	PR	41,915	44,875	47,015
P-4 EPIDEMIOLOGIST	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.3741					DUTY TRAVEL		2,440	3,200	3,110

BRAZIL-3600, NATIONAL DRUG QUALITY INSTITUTE

The purpose of this project is to strengthen the national system for drug control and production by expanding the activities of the Central Laboratory for the Control of Drugs, Medicaments and Foodstuffs, located in Rio de Janeiro (integrated with the Oswaldo Cruz Foundation), and by establishing a drug quality institute in São Paulo (in collaboration with the Adolfo Lutz Institute) to undertake training and research activities.

In recent years, the country's pharmaceutical industry has grown very rapidly, requiring--as do the official laboratories of the system--a greater number of qualified personnel. The Medicaments Center is responsible for coordinating the national system for the production of medicaments in official institutions and their free distribution, while effecting quality control of its products and participating in pharmacological monitoring activities. The Serviço Nacional de Fiscalização de Medicina e Farmácia is responsible, through its Committee for the Revision of Brazilian Pharmacopoea, for the supervision and monitoring of medicaments, and their standardization.

Accordingly, the project is designed to contribute to an improved coordination of the system, to train personnel in the areas mentioned above, and to provide the various agencies with advisory services.

TOTAL		12	60	60	TOTAL		33,165	407,810	437,610
P-5 PROJECT MANAGER	WR	12	12	12	SUBTOTAL	WR	33,165	51,200	54,700
4.3557					PERSONNEL-POSTS		28,665	46,200	49,700
P-4 BIOCHEMIST	UNDP	-	12	12	DUTY TRAVEL		4,500	5,000	5,000
4.4520					SUBTOTAL	UNDP	-	356,610	382,910
P-4 MICROBIOLOGIST	UNDP	-	12	12	PERSONNEL-POSTS		-	228,000	251,520
4.3964					PERSONNEL-CONSULTANTS		-	8,000	22,500
P-4 PHARMACOLOGIST	UNDP	-	24	24	DUTY TRAVEL		-	6,000	4,500
4.3558 4.4518					SUPPLIES AND EQUIPMENT		-	86,800	58,200
TOTAL		-	2	5	FELLOWSHIPS		-	-	14,420
CONSULTANT MONTHS	UNDP	-	2	5	MISCELLANEOUS COSTS		-	8,000	9,000
TOTAL		-	-	14	LOCAL PERSONNEL COSTS		-	19,810	22,770
FELLOWSHIP MONTHS	UNDP	-	-	14					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

BRAZIL-4100, NURSING SERVICES

The purpose of this project is to develop the nursing component within the health services to the capacity where it can provide the care required by the priority programs of the Government. In line with the country's development policy, PAHO/WHO is collaborating in the formulation of a policy and plan for the progressive development of nursing services.

TOTAL		48	48	48	TOTAL	146,120	158,810	176,210
P-4 NURSE .3658	PR	12	12	12	SUBTOTAL	PR 66,665	72,720	84,945
P-3 NURSE 4.0372 4.3415	WR	24	24	24	PERSONNEL-POSTS	39,475	41,675	43,905
G-4 SECRETARY 4.4231	WR	12	12	12	PERSONNEL-CONSULTANTS	8,100	9,000	10,200
TOTAL		3	3	3	DUTY TRAVEL	6,000	7,000	7,000
CONSULTANT MONTHS	PR	3	3	3	SEMINAR COSTS	-	-	6,500
TOTAL		17	17	17	FELLOWSHIPS	13,090	15,045	17,340
FELLOWSHIP MONTHS	PR	17	17	17	SUBTOTAL	WR 79,455	86,090	91,265

BRAZIL-4200, LABORATORY SERVICES

Through this project, it is proposed to collaborate with the Government in organizing the national laboratory network to support epidemiological surveillance and water and food quality control activities.

TOTAL		4	4	4	TOTAL	WR 10,800	12,000	13,600
CONSULTANT MONTHS	WR	4	4	4	PERSONNEL-CONSULTANTS	10,800	12,000	13,600

BRAZIL-4300, EPIDEMIOLOGY

The purposes of this project are to collaborate with the Ministry of Health in organizing epidemiological control and surveillance at the federal, regional and state levels, with a view to achieving the national goals according to the Ten-Year Health Plan for the Americas; to cooperate in the training of human resources in epidemiology and etiological diagnosis required for the organization of that infrastructure; to revise national standards and standardize methods for disease control; to establish epidemiological surveillance standards; to revise these standards and implement notification, analyses, and their dissemination; to maintain and promote the annual course on epidemiological surveillance; to conduct regional seminars as part of the multiplier effect; to collaborate with each of the projects being implemented and program their annual goals in accordance with the Ten-Year Health Plan; to collaborate with and galvanize the national program for diphtheria, tetanus, whooping cough, measles and poliomyelitis immunizations; and to set up coordinating mechanisms to support epidemiological activities.

TOTAL		36	36	36	TOTAL	154,255	170,145	183,360
P-4 EPIDEMIOLOGIST .1085	PR	12	12	12	SUBTOTAL	PR 58,605	85,780	92,295
P-4 EPIDEMIOLOGIST 4.3158	WR	12	12	12	PERSONNEL-POSTS	51,605	54,655	57,795
G-6 CLERK .3656	PR	12	12	12	DUTY TRAVEL	7,000	9,000	9,000
TOTAL		7	8	8	FELLOWSHIPS	-	22,125	25,500
CONSULTANT MONTHS	WR	7	8	8	SUBTOTAL	WR 95,650	84,365	91,065
TOTAL		25	25	25	PERSONNEL-POSTS	43,000	46,200	49,700
FELLOWSHIP MONTHS	PR	-	25	25	PERSONNEL-CONSULTANTS	18,900	24,000	27,200
FELLOWSHIP MONTHS	WR	25	-	-	DUTY TRAVEL	8,000	9,165	9,165
					SUPPLIES AND EQUIPMENT	6,500	5,000	5,000
					FELLOWSHIPS	19,250	-	-

BRAZIL-4311, VECTORS AND NATURAL RESERVOIRS OF OROPOUCH VIRUS IN THE AMAZON REGION

This project's main objective is to investigate the diseases and their causative agents introduced by the Trans-Amazon Highway construction force and colonists coming from other parts of Brazil, and the diseases and infectious agents of the Amazon basin that might affect the immigrants. These studies are being carried out by a 12-member multidisciplinary team from the Walter Reed Army Institute of Research and the Instituto Evandro Chagas in Belém. Their long-range mission is to develop a model for epidemiologic surveillance in the Amazon area; to train young Brazilian investigators; to acquire data to be used in the formulation of rational plans for the delivery of medical care, disease control, and prevention programs in the region; and to use the collected data to establish and evaluate priorities for research in tropical medicine. The study areas extend along more than 800 km of the Trans-Amazon Highway. Surveillance activities are designed to identify transmission of parasitic, bacteriologic, viral, rickettsial and mycotic agents and to obtain information about vectors, reservoirs, and ecologic conditions influencing disease agent introduction, transmission and maintenance.

FUND	1977	1978	1979	FUND	1977	1978	1979
----	----	----	----	----	----	----	----
	\$	\$	\$				
TOTAL	42	36	36	TOTAL	379,345	46,585	47,095
-----	-----	-----	-----	-----	-----	-----	-----
P-4 ECDLOGIST .4226	PG	12	-	SUBTOTAL	PR	12,885	38,785
G-5 SECRETARY .4291	PR	12	12	-----	-----	-----	-----
G-5 SECRETARY 4.4648	WR	12	12	PERSONNEL-POSTS		12,885	13,785
G-4 SECRETARY .4443	PR	12	12	GRANTS		-	25,000
-----	-----	-----	-----	-----	-----	-----	-----
TOTAL		1	-	SUBTOTAL	PG	336,600	-
-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	PG	1	-	PERSONNEL-POSTS		32,674	-
				PERSONNEL-CONSULTANTS		1,422	-
				DUTY TRAVEL		8,518	-
				LOCAL COSTS		293,986	-
				-----	-----	-----	-----
				SUBTOTAL	WR	29,860	7,800
				-----	-----	-----	-----
				PERSONNEL-POSTS		4,860	7,800
				GRANTS		25,000	-
				-----	-----	-----	-----

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	----	----	----		----	-----	-----	-----
							\$	\$	\$
TOTAL		4	4	4	TOTAL	PR	33,900	38,550	44,200
CONSULTANT MONTHS	PR	4	4	4	PERSONNEL-CONSULTANTS		10,800	12,000	13,600
FELLOWSHIP MONTHS	PR	30	30	30	FELLOWSHIPS		23,100	26,550	30,600

BRAZIL-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

In 1977, the former Zone Offices will be replaced by Area Offices. The general functions of these Offices will consist of monitoring the socioeconomic development trends in the country and reporting on them; promoting the incorporation of health activities in the development process; furnishing advice on health planning and programming; serving as liaison with the sub-regional, international, bilateral and private organizations in the country; participating in the planning, development and coordination of intercountry programs that include Brazil; and promoting the objectives of PAHO/WHO through association with professional training schools, institutions and associations.

		216	216	216			373,875	391,725	410,735
TOTAL		----	----	----	TOTAL	PR	-----	-----	-----
D-1 PAHO/WHO REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		205,175	222,225	236,235
.0303					DUTY TRAVEL		9,000	9,500	9,500
P-4 ADMINISTRATIVE OFFICER	PR	12	12	12	COMMON SERVICES		159,700	160,000	165,000
.4711									
G-8 OFFICE MANAGER	PR	12	12	12					
.0937									
G-6 ADMINISTRATIVE ASSISTANT	PR	12	12	12					
.3624									
G-5 ACCOUNTING CLERK	PR	12	12	12					
.3659									
G-5 SECRETARY	PR	24	24	24					
.0306 .3346									
G-4 MESSENGER	PR	12	12	12					
.3411									
G-3 CLERK	PR	12	12	12					
.3347									
G-3 CLERK-TYPIST	PR	24	24	24					
.3653 .4835									
G-2 DRIVER	PR	12	12	12					
.0308									
G-2 GUARD/JANITOR	PR	12	12	12					
.424E									
G-2 MESSENGER	PR	12	12	12					
.0309									
G-1 GUARD/JANITOR	PR	48	48	48					
.4452 .4453 .4454 .4455									

BRAZIL-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to collaborate in the national program for the development of health services, which is under the direction of the Ministry of Health and is carried out by the Departments of Health of the federal units. The program is based on legal provisions approved for the national health system and on the accelerated development of the national epidemiological surveillance system, the program for the extension of health and sanitation activities in the Northeast, and the national health manpower program. PAHO/WHO is supporting the national effort by advisors at the central and macroregional levels.

		156	156	156			501,920	569,815	610,795
TOTAL		----	----	----	TOTAL		-----	-----	-----
P-5 MEDICAL OFFICER	PR	48	48	48	SUBTOTAL	PR	315,875	421,860	480,795
.2065 .3046 .3907 .4602	WR	12	12	12					
P-5 MEDICAL OFFICER					PERSONNEL-POSTS		268,595	320,560	338,085
.40349					PERSONNEL-CONSULTANTS		-	30,000	68,000
P-4 ADMIN. METHODS OFFICER	PR	12	12	12	DUTY TRAVEL		14,820	35,445	35,000
.3388					FELLOWSHIPS		17,710	20,355	23,460
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	COMMON SERVICES		14,750	15,500	16,250
.2024									
P-4 MEDICAL OFFICER	WR	12	12	12	SUBTOTAL	WR	186,045	147,955	130,000
.43660									
G-5 SECRETARY	PR	48	48	48	PERSONNEL-POSTS		88,000	94,400	101,400
.4032 .4033 .4229 .4836					PERSONNEL-CONSULTANTS		67,500	39,000	13,600
G-2 DRIVER	PR	12	12	12	DUTY TRAVEL		30,545	14,555	15,000
.4272									
TOTAL		25	23	24					
CONSULTANT MONTHS	PR	-	10	20					
CONSULTANT MONTHS	WR	25	13	4					
TOTAL		23	23	23					
FELLOWSHIP MONTHS	PR	23	23	23					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BRAZIL-5160, INTEGRATED HEALTH DELIVERY SYSTEMS

The purpose of this project is to install, on an experimental basis, a low-cost integrated health delivery system in two selected areas in order to increase coverage, coordinate the formal and informal systems, and enlist the active participation of the community. Its specific objectives are to increase primary health services coverage to 70% of the population; to organize all health delivery levels into program areas, in coordination with those institutions operating in the selected areas; to incorporate into the program those activities carried out by the informal health system, consisting primarily of lay midwives, healers and lay dentists; and to establish an evaluation model capable of providing the necessary information for assessing feasibility and extension of the experience gained to other regions of the country.

TOTAL		96	-	-	TOTAL	PG	1,322,732	-	-
P-5 MEDICAL OFFICER	PG	12	-	-	PERSONNEL-POSTS		353,399	-	-
.4672					PERSONNEL-CONSULTANTS		297,849	-	-
P-4 MEDICAL OFFICER	PG	48	-	-	DUTY TRAVEL		27,000	-	-
.4673 .4675 .4677 .4678					SUPPLIES AND EQUIPMENT		19,259	-	-
P-3 NURSE	PG	24	-	-	FELLOWSHIPS		465,500	-	-
.4674 .4676					PROGRAM SUPPORT COSTS		159,725	-	-
P-3 TRAINING OFFICER	PG	12	-	-					
.4679									
TOTAL		85	-	-					
CONSULTANT MONTHS	PG	85	-	-					
TOTAL		665	-	-					
FELLOWSHIP MONTHS	PG	665	-	-					

BRAZIL-5400, HEALTH STATISTICS

Information about demand, availability and utilization of health services is scarce, incomplete and unreliable, primarily because of the lack of human resources. The same applies to birth and death registries, that only operate in the State capitals and other large cities.

The objectives of this project include an increase in the training capacity for auxiliary and middle-level statisticians, through the organization of short intensive courses; the improvement of the quality and coverage of the vital statistics registries; collaboration in the research of dynamic methods of statistical projections and in the design and installation of national systems; and the strengthening of regional agencies and State statistical units by guiding the efforts of the States to improve the quality, coverage and accuracy of vital and health statistics.

TOTAL		60	60	60	TOTAL		207,670	223,900	238,330
P-4 STATISTICIAN	WR	12	12	12	SUBTOTAL	PR	84,470	90,700	103,030
4.0369					PERSONNEL-POSTS		67,230	71,080	74,990
P-3 STATISTICIAN	PR	24	24	24	PERSONNEL-CONSULTANTS		-	-	6,800
.0928 .4264					DUTY TRAVEL		8,000	9,000	9,000
P-3 STATISTICIAN	WR	24	24	24	FELLOWSHIPS		9,240	10,620	12,240
4.3519 4.4030					SUBTOTAL	WR	123,200	133,200	135,300
TOTAL		2	2	2	PERSONNEL-POSTS		105,800	113,200	121,300
CONSULTANT MONTHS	PR	-	-	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,000
CONSULTANT MONTHS	WR	2	2	-	DUTY TRAVEL		12,000	14,000	14,000
TOTAL		12	12	12					
FELLOWSHIP MONTHS	PR	12	12	12					

BRAZIL-5402, CENTER FOR THE INTERNATIONAL CLASSIFICATION OF DISEASES IN PORTUGUESE

The purpose of this project is to support the activity of the Brazilian Center for Classification of Diseases. These activities include the study of problems relating to the International Classification of Diseases (ICD) in Portuguese; advice to WHO on the revision of the ICD; the preparation of the Portuguese edition of successive revisions of the ICD; and improvement of the quality of information contained in death certificates.

TOTAL		2	3	3	TOTAL		5,400	9,000	10,200
CONSULTANT MONTHS	PR	-	-	3	SUBTOTAL	PR	-	-	10,200
CONSULTANT MONTHS	WR	2	3	-	PERSONNEL-CONSULTANTS		-	-	10,200
					SUBTOTAL	WR	5,400	9,000	-
					PERSONNEL-CONSULTANTS		5,400	9,000	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BRAZIL-6000, DEVELOPMENT OF HUMAN RESOURCES

The purposes of this project are to promote and support mass training for mid-level and auxiliary personnel for health services with plans for reaching the goal of 160,000 trained persons in all categories by 1979 with priority given to the subsystem of public health (Ministry of Health and State Secretariats of Health); to promote and support the establishment and development of 10 health care and education regions providing coverage for a total of 15 to 20 million inhabitants in order to progressively adapt health manpower education to the demands of regional services that meet the health needs of the inhabitants and the region; and to promote the organization and development of state health manpower systems for carrying out studies and research on the needs, characteristics and utilization of health manpower, for planning and coordinating manpower training and for evaluating the training and use of human resources in each State.

TOTAL		156	156	12	TOTAL	395,240	393,686	29,130
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P-5 PROJECT MANAGER	PG	12	12	-				
.4566								
P-4 HEALTH MANPOWER OFFICER	PG	60	60	-	SUBTOTAL	PR 38,700	42,025	29,130
.4567 .4568 .4570 .4571					-----	-----	-----	-----
.4572					PERSONNEL-POSTS	9,110	9,750	10,430
G-7 ADMINISTRATIVE ASSISTANT	PG	12	12	-	PERSONNEL-CONSULTANTS	8,100	9,000	3,400
.4573					SEMINAR COSTS	9,940	10,000	-
G-6 SECRETARY	PR	12	12	12	FELLOWSHIPS	11,550	13,275	15,300
.4234					-----	-----	-----	-----
G-5 SECRETARY	PG	24	24	-	SUBTOTAL	PG 356,540	351,661	-
.4575 .4576					-----	-----	-----	-----
G-4 SECRETARY	PG	24	24	-	PERSONNEL-POSTS	278,897	281,042	-
.4574 .4577					PERSONNEL-CONSULTANTS	34,120	25,668	-
G-2 DRIVER	PG	12	12	-	DUTY TRAVEL	24,612	26,059	-
.4578					SEMINAR COSTS	1,973	-	-
TOTAL		13	9	1	SUPPLIES AND EQUIPMENT	7,166	5,863	-
-----		-----	-----	-----	PROGRAM SUPPORT COSTS	9,772	13,029	-
CONSULTANT MONTHS	PR	3	3	1				
CONSULTANT MONTHS	PG	10	6	-				
TOTAL		15	15	15				
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FELLOWSHIP MONTHS	PR	15	15	15				

BRAZIL-6001, DEVELOPMENT OF TEACHING OF PATHOLOGY

The objective of this project is to improve the teaching of pathology in professional health education institutions throughout Brazil. The program is being conducted by the Universidade Federal Fluminense, Brazil. This project is financed with funds granted to PAHEF by the W. K. Kellogg Foundation.

TOTAL	PH	36,601	-	-
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SUPPLIES AND EQUIPMENT		36,601	-	-

BRAZIL-6600, DENTAL EDUCATION

The purposes of this project are to collaborate in the development of dental programs in the country, especially at the Dental School of Piracicaba, in order to train dentists capable of solving oral health problems in the communities; to promote scientific research in the areas of technology, oral biology and community health; to provide the community with services in the clinics of the above-mentioned School and in extramural services; and to train dental auxiliary personnel, especially prosthetic technicians, auxiliaries and hygienists.

TOTAL		2	2	2	TOTAL	PR	15,330	16,865	18,980
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CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		9	9	9	SUPPLIES AND EQUIPMENT		3,000	2,900	3,000
-----		-----	-----	-----	FELLOWSHIPS		6,930	7,965	9,180
FELLOWSHIP MONTHS	PR	9	9	9					

BRAZIL-6601, INNOVATIONS IN DENTAL EDUCATION AND DENTAL CARE

The objective of this project is to introduce innovations in dental education and dental care delivery through the teaching program of the Federal University of Rio Grande do Sul, Brazil. This project is financed with funds granted to PAHEF by the W. K. Kellogg Foundation.

TOTAL	PH	25,000	-	-
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SUPPLIES AND EQUIPMENT		25,000	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

BRAZIL-6900, IMMUNOLOGY RESEARCH AND TRAINING CENTER

The PAHO/WHO Immunology Research and Training Center (IRTC) in São Paulo has two main objectives: to provide candidates from Latin American countries with postgraduate training in basic immunology and to give support to research projects directly or indirectly related to health problems in the Region. The first objective is being achieved through four-month annual courses on basic immunology given by local and visiting professors. The IRTC also offers occasional courses on immunologic aspects of local health problems. A course on the immunology of Chagas' disease was given in July 1976. The IRTC accepts as fellows graduate students of the University of São Paulo and the Escola Paulista de Medicina to carry on their research projects. The research activities of IRTC concentrate on problems of immediate hypersensitivity and Chagas' disease.

TOTAL		2	2	2	TOTAL	WR	20,400	21,000	20,800
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CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					GRANTS		15,000	15,000	14,000

BRAZIL-8100, MEDICAL TEXTBOOKS

The program aims to improve the quality of medical education in Brazil by providing high-quality, low-cost medical textbooks to students in each subject of the medical curriculum, thus reducing dependence on teachers' notes and rote memorization. The student population covered should be greatly increased during the next few years, and the country project staff will devote a large part of their efforts to bringing this about.

TOTAL		24	24	24	TOTAL	PH	35,365	37,155	39,795
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P-1 ADMINISTRATIVE OFFICER	PH	12	12	12	PERSONNEL-POSTS		32,365	34,155	36,295
.4331					DUTY TRAVEL		3,000	3,000	3,500
G-5 CLERK	PH	12	12	12					
.4381									

BRAZIL-8700, LATIN AMERICAN CENTER OF EDUCATIONAL TECHNOLOGY FOR HEALTH

The purpose of the Latin American Center of Educational Technology for Health (CLATES) is to improve the quality and quantity of health personnel through the use of new educational methods and new teaching techniques. To this end, the project will cooperate in training professors in the use of new educational principles and modern technology; in developing courses in health science that emphasize self-teaching and are consistent with the health situation of each country; in preparing multimedia instructional packages; in developing a training or tutorial evaluation system; and in researching and developing a new educational technology.

Plans are to gradually extend this program to other countries of the Region by providing technical assistance for improving educational methodology and technology and providing for the distribution of educational material it produces. CLATES-Rio is developing educational programs in biomedical sciences, medicine, public health and nursing and in the future will prepare teaching material on dentistry, nutrition, and other health-related professions.

TOTAL		24	24	24	TOTAL	PR	76,535	86,835	94,795
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P-5 MEDICAL EDUCATOR	PR	12	12	12	PERSONNEL-POSTS		50,660	62,035	65,495
.4012					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
G-7 ADMINISTRATIVE ASSISTANT	PR	12	12	12	DUTY TRAVEL		5,000	6,000	7,000
.4082					SUPPLIES AND EQUIPMENT		7,475	12,800	15,500
TOTAL		2	2	2					
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CONSULTANT MONTHS	PR	2	2	2					

CANADA

Canada is a federal state divided into ten provinces and two territories. It has an area of 3,852,000 square miles and a population of 22,095,000 (1973). Most of the population is urban and most is located in three provinces, Quebec, Ontario and British Columbia. Responsibility for health matters is distributed between the federal and the provincial governments.

On the national level, the Department of National Health and Welfare is the principal federal agency in health matters. It is responsible for the overall promotion, preservation, and restoration of the health of Canadians, and for their social security and social welfare. The Department acts in conjunction with other federal agencies and with provincial and local services. The provincial governments are directly responsible for the actual administration of health services. In some instances, considerable responsibility is delegated to the municipalities by the provincial legislatures. Although the patterns of health services are similar, the organization, financing, and administration of these services vary from province to province.

Other federal agencies which carry out specialized health functions include, for example, Statistics Canada, which is responsible for gathering vital and other health statistics, the Department of Veterans Affairs which administers hospitals and health services for war veterans, and the Department of Agriculture which has certain responsibilities in connection with health aspects of food production.

The health side of the Department of National Health and Welfare, under the Deputy Minister of National Health, is organized into five branches: Health Protection, Medical Services, Health Programs, Long-Range Health Planning, and Fitness and Amateur Sport. In addition, there is the Medical Research Council, which reports to Parliament through the Minister of National Health and Welfare.

The Health Protection Branch is responsible for developing an integrated program to protect the public against unsafe foods, drugs, cosmetics, medical and radiation-emitting devices, against harmful microbial agents and technological and social environments deleterious to health, against environmental pollutants and contaminants of all kinds, and against fraudulent drugs and devices.

The Branch contains six operational Directorates - Foods, Drugs, Environmental Health, Laboratory Centre for Disease Control, Non-Medical Use of Drugs, and Field Operations. It is responsible for enforcing the Food and Drugs Act and Regulations, the Narcotic Control Act and Regulations, the Proprietary or Patent Medicine Act, and the Radiation-Emitting Devices Act and Regulations. In addition, under the Hazardous Products Act and Regulations, the Branch has joint responsibility with the Department of Consumer and Corporate Affairs for product safety.

The responsibilities of the Medical Services Branch include health care and public health services for Indians and Eskimos and all residents of the Yukon and Northwest Territories, as well as quarantine and immigration medical services, public service health, a national prosthetics service, and civil aviation medicine, disability assessment and emergency health services.

The Long-Range Health Planning Branch is concerned with assessing the orientation of health services and the organization of resources.

The purpose of the Fitness and Amateur Sport Branch is to encourage, promote, and develop fitness and amateur sport through encouraging the excellence of Canada's athletes and encouraging participation in activities oriented toward fitness and recreation.

The Health Programs Branch administers federal aspects of Canada's two major health programs, hospital and medical insurance; supports health care delivery system and resource development; undertakes health promotion; and both supports and conducts research. This Branch is made up of the following units: Program Development and Evaluation, Health Insurance, Research Programs, Health Manpower, Health Facilities Design, Health Systems, Health Standards and Consultants, Community Health, and Health Economics and Management Services.

Provincial hospital insurance programs, operating in all provinces and territories since 1961, cover 99 per cent of the population of Canada. Under the Hospital Insurance and Diagnostic Services Act of 1957, the Federal Government shares with the provinces the cost of providing specific hospital services to patients insured by these programs.

Public medical care is provided under the Medical Care Act which was passed by Parliament in December 1966. Federal contributions to participating provinces became payable from 1 July 1968. By 1 April 1972 all provinces and territories had entered the federal program. Under the Act the Federal Government pays to each province half the per capita cost of the insured services of the national program furnished under the plans of all provinces, excluding administration. The plan must be universally available to all eligible residents on equal terms and conditions and must cover at least 95 per cent of the total eligible provincial population (in fact the plans cover over 99 per cent of those eligible). Comprehensive coverage must be provided for all medically required services rendered by a physician or surgeon. The program includes services traditionally covered by the health insurance industry as well as preventive and curative services traditionally covered through the public sector in each province, such as medical care of patients in mental and tuberculosis hospitals.

The purpose of the federal Health Manpower Development Program is to improve and maintain, through the collaboration of federal and provincial governments and other concerned agencies, the quality, supply, distribution, and productivity of all health manpower in Canada at a level that makes possible the delivery of effective and efficient total health services. The program includes the administration of the Health Resources Fund Act of 1966, which provides financial assistance in the planning, acquisition, construction, renovation, and equipping of health training and research facilities. Up to 50 per cent of eligible costs of approved projects are supported by federal contributions. The program also includes the administration of the Professional Training Grant, which provides assistance to the provinces in an extended program for the training of hospital personnel and other health personnel.

The federal community health program is intended to promote lifestyles that will improve personal health, and to develop comprehensive community health services readily accessible to all Canadians.

The responsibility for regulations of health care, operation of health insurance programs, and direct provision of specialized services rests with the provincial governments. Provincial programs concerning tuberculosis and mental illness are giving increasing attention to preventive services. Programs related to other health problems such as cancer, alcoholism and drug addiction, venereal diseases, and dental health are being developed by government agencies, often in cooperation with voluntary associations. A number of provincial programs are also being directed to meet the needs of specific population groups, such as mothers and children, the aged, the needy, and those requiring rehabilitation care.

Environmental health responsibilities, involving education, inspection, and enforcement of standards, are frequently shared by provincial health departments and other agencies.

Public health or community health units are among the most decentralized. Some are also responsible for local health education, school health, and organized home care. Although local and regional involvement in health services has been concentrated on hospital planning and some aspects of public health, several provinces have inaugurated district and regional boards which participate in the coordination of all health-related services in their areas.

A working document entitled "A New Perspective on the Health of Canadians" was introduced in April 1974. It has been adopted as the basis for national health planning. The health ministers of the federal and provincial governments have established a committee to define priorities and strategies for action arising out of this document. While recognizing the high level of development of the health system with regard to caring for the sick, "New Perspective" stresses the tremendous amount of work that remains to be done to protect and to improve the health of Canadians and to reduce the incidence of the principal causes of morbidity and mortality in our times, such as lung cancer, cardiovascular disease, and traffic accidents. The importance of the social and physical environments and lifestyle in the promotion of health are also stressed.

The document proposes a subdivision of the health field into four principal elements. The human biology element comprises all aspects of health that are developed within the human body by reason of its basic biology and its organic makeup. The environment element comprises health matters that are external to the body and more or less beyond the control of the individual. The lifestyle element comprises voluntary health-affecting decisions made by individuals. The health care organization element comprises the quantity, quality, arrangement, nature, and relationships of people and resources in the provision of health care.

The working document sets out two broad objectives for the Federal Government to pursue in cooperation with others: to reduce health hazards for persons whose risks from these hazards are high, and to improve access to health care for those whose access is unsatisfactory. The report then proposes five strategies for the pursuit of those objectives. The health promotion strategy aims to encourage individuals and organizations to accept responsibility for and to take action in matters affecting health. The regulatory strategy supports the use of federal and provincial regulatory powers to reduce hazards to health. The research strategy would help discover and apply knowledge to solve health problems. The health care efficiency strategy would help the provinces reorganize the systems for delivering health care so as to balance cost, accessibility, and effectiveness. Finally, the goal-setting strategy would set goals to raise the level of health of Canadians and improve the efficiency of the health care system.

CANADA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	39,120	100.0	31,860	100.0	39,780	100.0
HEALTH SYSTEMS	39,120	100.0	31,860	100.0	39,780	100.0
5100 GENERAL PUBLIC HEALTH SYSTEMS	27,720	70.9	31,860	100.0	39,780	100.0
5300 PLANNING	11,400	29.1	-	-	-	-
GRAND TOTAL =====	39,120	100.0	31,860	100.0	39,780	100.0

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	---FELLOWSHIPS---		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS				
1977	\$				\$		\$	\$	\$	\$	\$
PAHO---PR	13,860	-	-	-	-	18	13,860	-	-	-	-
PG	11,400	3	-	-	-	-	-	-	-	-	-
WHO---WR	13,860	-	-	-	-	18	13,860	-	-	-	-
TOTAL	39,120	3	-	-	-	36	27,720	-	-	-	-
PCT. OF TOTAL	100.0				-		70.9	-	-	-	-
1978											
PAHO---PR	15,930	-	-	-	-	18	15,930	-	-	-	-
WHO---WR	15,930	-	-	-	-	18	15,930	-	-	-	-
TOTAL	31,860	-	-	-	-	36	31,860	-	-	-	-
PCT. OF TOTAL	100.0				-		100.0	-	-	-	-
1979											
PAHO---PR	18,360	-	-	-	-	18	18,360	-	-	-	-
WHO---WR	21,420	-	-	-	-	21	21,420	-	-	-	-
TOTAL	39,780	-	-	-	-	39	39,780	-	-	-	-
PCT. OF TOTAL	100.0				-		100.0	-	-	-	-

PAHO-PP-REGULAR BUDGET						PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND					
PH-COMMUNITY WATER SUPPLY						PJ-GRANTS RELATED TO CAREC					
PA-INCAP - REGULAR BUDGET						WHO---WR-REGULAR BUDGET					
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS						UNDP-UNITED NATIONS DEVELOPMENT PROGRAM					
PG-GRANTS AND OTHER CONTRIBUTIONS						UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES					
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION						WO-GRANTS AND OTHER FUNDS					

FUND	1977	1978	1979
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FUND	1977	1978	1979
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	\$	\$	\$

CANADA - DETAIL.

CANADA-5101, FELLOWSHIPS

The purpose of this project is to participate in the quantitative and qualitative development of the country's health services, through the training of necessary human resources.

TOTAL			36	36	39	TOTAL		27,720	31,860	39,780
FELLOWSHIP MONTHS	PR	18	18	18		SUBTOTAL	PR	13,860	15,930	18,360
FELLOWSHIP MONTHS	WR	18	18	21						
						FELLOWSHIPS		13,860	15,930	18,360
						SUB TOTAL	WR	13,860	15,930	21,420
						FELLOWSHIPS		13,860	15,930	21,420

CANADA-5300, HEALTH PLANNING

The purpose of this project is to cooperate with the Ministry of National Health and Welfare of Canada and the Ministry of Social Affairs of Quebec in activities related to health planning, teaching of biostatistics, and research design and operation.

TOTAL		3	-	-	TOTAL	PG	11,400	-	-
P-5 HEALTH PLANNER 4054	PG	3	-	-	PERSONNEL-POSTS		11,400	-	-

CHILE

The recently enacted Constitutional Laws stipulate that Chile is a unitary State and divide it into regions whose administration is functionally and territorially decentralized. It is the duty of the State to promote the common good by creating social conditions that enable each and every member of the national community to realize himself spiritually and materially. The family is recognized as the fundamental unit of society, and the protection and strengthening of it is considered to be a State duty. Accordingly, assigned special importance among constitutional rights are the rights to education, to health, and to live in an unpolluted environment.

With respect to health, the State assumes the responsibility of ensuring free and fair access to activities for the promotion, protection and recovery of health and the rehabilitation of the individual. It also assumes responsibility for the coordination and control of integrated health activities. It is a primary duty of the State to carry out health activities, without prejudice to free private enterprise in such form and on such conditions as are stipulated by the law. As regards protection from environmental pollution, it is the duty of the State to ensure that this right is not affected, and to sponsor the preservation of nature.

The Ministry of Health is the State agency responsible for establishing health policy. The duties of the Ministry include definition of health plans, establishment of standards, and supervision of their observation. Health activities are the responsibility of the Regional Health Agencies. Since it was recently decided to divide the country into 12 regions plus the metropolitan area, and since no experience is available for the operation and functioning of the Regional Health Secretariats, it was decided that three representative regions would be considered experimental with a view to making a critical study of the application of the programs, standards and provisions governing the various and changing health situations in the country.

Chile has an area of 756,945 km², excluding the Antarctic territory. The estimated population of Chile in 1976 was 10,253,014 inhabitants, of which 37.1% lives in the metropolitan region. Approximately 23% of the population lives in rural areas. The illiteracy rate is in the order of 9%. The birth rate stood at 25 per 1,000 in 1975, when the natural increase of the population was 1.78 per 100 inhabitants. The general mortality and infant mortality rates in 1975 were 7.2 per 1,000 inhabitants and 55.4 per 1,000 live births, respectively, the lowest figures ever recorded.

Deaths due to diseases of the circulatory system are the leading cause of death, accounting for 21.1% of all deaths in 1975, followed by deaths caused by malignant tumors (14.1%), respiratory system (12.1%), accidents and violence (10.2%), digestive system (6.9%), perinatal (6.0%), infectious and parasitic (5.9%), endocrine, nutrition and metabolism (2.8%), and tuberculosis (2.6%).

Thanks to active immunization programs incorporated into regular health activities, communicable diseases have been decreasing in importance. Thus, in 1975, the following figures, with rates per 100,000 population, were recorded: 428 cases of diphtheria with 37 deaths (rates of 4.17 cases and 0.36 deaths); 2,550 cases of whooping cough with 45 deaths (rates of 24.9 and 0.44); only two cases of poliomyelitis; and 8,413 cases of measles with 177 deaths (rates of 82.1 and 1.73). It is to be noted that, as a result of the expansion of immunization programs in the first 37 weeks of 1976, only 1,656 cases of measles were notified. In 1975 the following immunizations were administered: 445,511 diphtheria-tetanus; 1,294,101 trivalent vaccine (diphtheria, whooping cough, tetanus); 373,161 measles; and 1,227,753 poliomyelitis.

Among the acute diseases, infectious intestinal diseases resulting from unsatisfactory environmental sanitation are very important. In 1975 a total of 6,110 cases of typhoid and paratyphoid, with 76 deaths and rates of 59.6 and 0.74 per 100,000 population, respectively, were notified.

Malaria and smallpox have long been eradicated. In addition, the country continues to be free of *Aedes aegypti*. Tuberculosis mortality follows a downward trend. In 1975 there were 1,930 deaths due to tuberculosis, the rate being 18.82 per 100,000 inhabitants; no information is available on tuberculosis morbidity. A total of 839,815 BCG vaccinations were administered, and 84.8% of all newborn children were vaccinated. Venereal diseases continue to be an important problem, and despite control programs their trend remains unchanged. In 1975, 5,252 cases of syphilis were notified.

Maternal and child health and family welfare have been a continuing concern of the Government and of its health authorities. Maternal mortality decreased from 2.7 per 1,000 live births in 1967 to 1.3 in 1975 and mortality caused by abortion from 1.0 per 1,000 live births in 1967 to 0.4 in 1975, as a result of the extension of professional maternity care, the education of women concerning the dangers of abortions induced by untrained persons and the desirability of limiting the size of the family in relation to its economic possibilities and the provision of means for fertility control. Thus, as of 31 December 1975, 359,849 women covered by the Servicio Nacional de Salud took part in programs for fertility control, in which preference was assigned to IUD's (68.4%).

Mention must be made of the success of the child care programs which, in the period 1966-1975, succeeded in reducing child mortality by half: from 100.2 to 55.4 per 1,000 live births. With the technical assistance of PAHO/WHO, UNICEF and UNFPA, an energetic program has been undertaken in recent years focused on high-risk areas. In the future, it is planned to direct it primarily at the rural areas.

An important factor in these results has been the nutrition program aimed at supplying milk and high-value protein foods to pregnant women, nursing mothers, preschool children and schoolchildren. In 1975 the Servicio Nacional de Salud supplied its beneficiaries with 23,584,271 kilos of milk. At the same time, a continuing survey of the nutritional status of its beneficiaries has been carried out by the Servicio Nacional de Salud, the results of which showed that in 1975, in a sample of 2,030,118 children under six years of age, 84.5% were well fed, 12.1% suffered from mild malnutrition, 2.7% from medium-grade malnutrition, and 0.7% from serious malnutrition. The most seriously affected age groups are those between 6 and 11 months and 12 and 23 months.

Mention has already been made of the concern of the Government for the problem of chronic diseases, which have come to occupy the leading place among causes of death, in particular cardiovascular diseases and malignant tumors. As regards cancer, programs are under way for the early diagnosis of gastric and cervical cancer. Due to the high incidence of dental diseases, the Government has been forced to give serious consideration to oral hygiene programs: extension of fluoridation of drinking water; dental education; and promotion of dental care, with increased coverage and emphasis on the care of children.

According to the 1970 census data, 72.2% of urban dwellings and 8.5% of rural dwellings had piped drinking water and 47.0% of urban houses has sewage disposal facilities. Sewage, mining and industrial wastes pollute water courses and the sea; only 0.27% of sewage is treated in any way.

Air pollution is a major problem, chiefly in Santiago, which is subject to adverse meteorological conditions. The production of solid waste in urban areas amounts to 1.5 m³ per 1,000 population, and collection disposal systems are inadequate. The basic problem affecting all environmental sanitation activities is the dispersion of responsibilities between a number of State agencies. The Government intends to unify them in a single Sanitary Works Enterprise, and has requested cooperation from UN agencies for this purpose.

Foot-and-mouth disease has been eradicated from the national territory. Bovine tuberculosis and brucellosis are important problems that seriously affect the availability of protein foods. Hydatidosis is the most widespread animal disease affecting humans. Rabies is now restricted to two foci in the country (south of Santiago and Malleco-Cautín); no human cases have been reported for several years, and animal cases are very infrequent (only one in 1975), so that its early eradication is expected.

The Instituto Bacteriológico de Chile, which in recent years, for various reasons, has not been providing the services expected of it, has received special attention. Its technical procedures have been updated and its equipment is being renewed, and as a result there has been a substantial increase in its efficiency and production. For that purpose, PAHO/WHO and UNDP technical assistance has been provided.

The problems of physical, sensory and mental disability have been of great concern to the Government. The pertinent unit of the Ministry has prepared a detailed program for the rehabilitation of the disabled, which gives particular emphasis to the training of qualified personnel. The training of teachers of the deaf, the blind and the mentally deficient is the responsibility of the Faculty of Education of the University of Chile, with the assistance of the Ministry of Health.

The shortage of professional health workers, especially physicians and nurses, has led to the establishment in recent years of many new schools of medicine and nursing, which, it is hoped, will satisfy the demand for these professionals in the future. In addition, the chemico-pharmaceutical and dental curricula are being revised. An oral pathology center has been established in the Faculty of Dentistry of Santiago.

The teaching of public health is the responsibility of the Department of Public Health and Social Medicine of the University of Chile. The curriculum has been revised and the faculty strengthened. The Faculty of Physical Sciences and Mathematics of the University of Chile has established the speciality of sanitary engineering and, in this regard, is receiving technical assistance from PAHO/WHO.

As in most of the Latin American countries, textbooks are beyond the economic reach of most of the students because of their high cost. PAHO/WHO is helping to solve this problem by publishing selected textbooks at cost price; this program is benefiting medical and nursing students. Basic diagnostic equipment for medical students is expensive and therefore within the economical reach of very few students. PAHO/WHO is helping to solve this problem through a method of financing that makes these instruments available to all students. This program has been warmly welcomed and efforts are therefore being made to extend it to all faculties of medicine.

CHILE
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	275,329	34.7	168,630	22.4	176,960	25.9
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	161,989	20.4	55,120	7.3	51,840	7.6
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	11,720	1.5	15,810	2.1	15,420	2.3
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	124,629	15.7	10,000	1.3	10,000	1.5
1400 NUTRITION	5,000	.6	10,500	1.4	8,500	1.2
1700 CHRONIC DISEASES	20,640	2.6	18,810	2.5	17,920	2.6
ENVIRONMENTAL HEALTH SERVICES	93,500	11.8	99,545	13.4	106,080	15.5
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	48,010	6.1	51,855	7.0	56,160	8.2
3200 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
FOOT-AND-MOUTH DISEASE	45,490	5.7	47,690	6.4	49,920	7.3
COMPLEMENTARY SERVICES	19,840	2.5	13,965	1.9	19,040	2.8
4100 NURSING	12,520	1.6	5,655	.8	9,520	1.4
4500 REHABILITATION	7,320	.9	8,310	1.1	9,520	1.4
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	518,031	65.3	576,596	77.4	508,230	74.1
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	176,900	22.3	191,665	25.7	204,630	29.9
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	95,050	12.0	104,500	14.0	110,350	16.1
5100 GENERAL PUBLIC HEALTH SYSTEMS	81,850	10.3	87,165	11.7	94,280	13.8
DEVELOPMENT OF HUMAN RESOURCES	124,891	15.8	110,275	14.8	126,680	18.4
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	63,460	8.0	54,320	7.3	62,300	9.1
6100 PUBLIC HEALTH	36,260	4.6	27,545	3.7	33,800	4.9
6400 ENVIRONMENTAL SCIENCES	18,420	2.3	18,255	2.4	22,120	3.2
6600 DENTISTRY	6,751	.9	10,155	1.4	8,460	1.2
PHYSICAL RESOURCES	216,240	27.2	274,656	36.9	176,920	25.8
7300 PRODUCTION OF BIOLOGICALS	216,240	27.2	274,656	36.9	176,920	25.8
GRAND TOTAL =====	793,360	100.0	745,226	100.0	685,190	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

CHILE
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA VI CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA VI (PR)	<u>Program Planning and General Activities</u>			90	48,055	90	50,945	90	53,950
	Area Representative	0.0310	D-1						
AMRO-1360 (PR)	<u>Maternal and Child Health and Family Welfare</u>			71	7,800	71	11,610	71	12,325
	Medical Officer	0.2117	P-5						
AMRO-4160 (PR)	<u>Nursing</u>			102	7,935	102	12,460	102	13,245
	Nurse	0.0895	P-4						
AMRO-4360 (WR)	<u>Epidemiological Surveillance</u>			102	8,740	102	12,670	102	13,420
	Epidemiologist	4.0846	P-4						
AMRO-5360 (PR)	<u>Health Systems - Planning</u>			94	15,030	94	15,895	94	16,840
	Health Planner	0.0915	P-5						
AMRO-5460 (PR)	<u>Statistics and Information Systems</u>			66	5,580	66	8,170	66	8,715
	Statistician	0.4853	P-3						
AMRO-5560 (PR)	<u>Management Systems</u>			56	7,485	56	7,925	56	8,410
	Administrative Methods Officer	0.4590	P-4						
AMRO-6260 (WR)	<u>Development of Human Resources - Medicine</u>			96	6,545	96	10,135	96	10,680
	Medical Educator	4.3685	P-5						
Total All Programs				677	107,170	677	129,810	677	137,585

* The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CHILE - DETAIL

CHILE-0100, COMMUNICABLE DISEASE CONTROL

Quarantinable diseases and malaria have been eradicated in the country. Enteric diseases, including salmonellosis, show high rates of incidence. Venereal diseases show an upward trend, and mortality from tuberculosis has remained stable, whereas the incidence of poliomyelitis has decreased notably. In the last few years, no human cases of zoonoses have been recorded, and there were only four isolated cases of animal rabies. Hydatidosis presents a serious problem that must be dealt with through a national policy for the establishment of a specific program.

The purpose of this project is to cooperate in developing research and programs for the control of enteric diseases (especially salmonellosis) and venereal diseases. Besides strengthening the epidemiological surveillance system, other activities include the development of research for improving control programs for enteric and venereal diseases.

TOTAL		2	2	2	TOTAL	PR	11,720	15,810	15,420
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		6	6	6	SEMINAR COSTS		-	2,500	-
FELLOWSHIP MONTHS	PR	6	6	6	SUPPLIES AND EQUIPMENT		1,700	2,000	2,500
					FELLOWSHIPS		4,620	5,310	6,120

CHILE-1302, EXTENSION OF MATERNAL AND CHILD HEALTH AND FAMILY WELFARE SERVICES

The purpose of this project, which is characterized by a multiagency approach, is to contribute to the improvement of maternal and child health conditions and to promote family welfare in those areas where biodemographic and health statistics show priority needs. The activities of this project will be incorporated gradually into the regular operations of the health services system.

TOTAL		2	-	-	TOTAL	UNFPA	113,804	-	-
CONSULTANT MONTHS	UNFPA	2	-	-	PERSONNEL-CONSULTANTS		4,707	-	-
TOTAL		17	-	-	SUPPLIES AND EQUIPMENT		89,005	-	-
FELLOWSHIP MONTHS	UNFPA	17	-	-	FELLOWSHIPS		12,853	-	-
					LOCAL PERSONNEL COSTS		7,239	-	-

CHILE-1303, CLINICAL AND SOCIAL PEDIATRICS

In 1975, more than one-third of the population of Chile was under 15 years. This emphasizes the importance of the corresponding age groups. Infant mortality rates (including both infants under one year of age and preschool children) have decreased steadily and markedly in the last few decades. The progress noted in pediatric training has been important in this improvement of child health conditions.

The purpose of this project is to cooperate in providing pediatricians with a training that offers them extensive knowledge, not only in their field but also in the management of child health care services. Such training will continue to be provided for physicians in this country and for fellowship holders from other countries in the Region, in the Roberto del Rio Hospital supported by the Faculty of Medicine of the University of Chile.

TOTAL	PR	10,000	10,000	10,000
COURSE COSTS		10,000	10,000	10,000

CHILE-1304, PROGRAM OF EARLY STIMULATION

The purpose of this project has been to award a fellowship so that a medical officer could visit various hospital centers in four Latin American countries to evaluate the methodology being used in a pilot plan which examines the possible effects of certain sensory stimuli on infants of up to 18 months of age, in order to improve the development of their intellectual functions.

TOTAL		1	-	-	TOTAL	UNDP	825	-	-
FELLOWSHIP MONTHS	UNDP	1	-	-	FELLOWSHIPS		825	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CHILE-1400, NUTRITION

Undernourishment and malnutrition have an effect on population, especially children, and are often the primary or associated cause of death among children. The formulation of suitable policies and programs for improving the nutritional status of the population requires prior knowledge of the social and biological factors affecting this status.

The purposes of this project are to cooperate in obtaining information on the nutritional status of the regions of the country and to lay the foundations for the formulation and implementation of national food and nutrition policies.

TOTAL	PR	5,000	10,500	8,500
SEMINAR COSTS		-	2,500	-
GRANTS		5,000	8,000	8,500

CHILE-1700, CHRONIC DISEASES

The purpose of this project is to cooperate with national programs for the control of chronic diseases, especially in primary or secondary prevention of the causes of morbidity for which effective prevention techniques exist. This is the case with rheumatic fever, rheumatic cardiopathy, diabetes mellitus, hypertension and some forms of cancer.

Activities in this project include the promotion of epidemiological clinical research, the improvement of records, and the formulation of programs of action which include the joint participation of regional medical care services and the training of the professional personnel necessary to implement these actions.

TOTAL	2	2	2	TOTAL	PR	20,640	18,810	17,920
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS	5,400	6,000	6,800
TOTAL		12	6	6	SEMINAR COSTS	-	2,000	-
FELLOWSHIP MONTHS	PR	12	6	6	SUPPLIES AND EQUIPMENT	4,000	3,500	3,000
				FELLOWSHIPS	9,240	5,310	6,120	
				GRANTS	2,000	2,000	2,000	

CHILE-2000, ENVIRONMENTAL SANITATION

Urban growth and industrial development are creating serious problems of sanitation and pollution of natural environmental resources. Several institutions exist in the country for dealing with matters related to sanitation and control of environmental pollution. However, there is no suitable means of coordination for the establishment of policies, purposes and goals concerning the optimum use of environmental resources.

The purposes of this project are to organize environmental sanitation and pollution control activities as the basis for establishing an environmental sanitation system responsible for planning, evaluation and control. To this end, cooperation is under way in the study of existing legal aspects and institutional structures concerning agencies and groups responsible for the planning and implementation of programs for environmental sanitation and protection of natural resources and for pollution control. The project will participate in the creation of a system of interinstitutional coordination to study the problems, propose solutions, and advise the executing agencies; it will also collaborate in the formulation and development of plans of action.

TOTAL	12	12	12	TOTAL	WR	48,010	51,855	56,160
P-4 SANITARY ENGINEER 4.2094	WR	12	12	12	PERSONNEL-POSTS	39,000	42,200	45,700
TOTAL		1	1	1	PERSONNEL-CONSULTANTS	2,700	3,000	3,400
CONSULTANT MONTHS	WR	1	1	1	DUTY TRAVEL	2,000	2,000	2,000
TOTAL		3	3	3	SEMINAR COSTS	1,000	1,000	1,000
FELLOWSHIP MONTHS	WR	3	3	3	SUPPLIES AND EQUIPMENT	1,000	1,000	1,000
				FELLOWSHIPS	2,310	2,655	3,060	

CHILE-3200, FOOT-AND-MOUTH DISEASE CONTROL

Since the goals of the first stage of the National Plan for the Control of Foot-and-Mouth Disease (goal-morbidity 0.0 x 10,000) have been met, the second stage is being planned. The goal of this stage is to eradicate the disease completely in the country. To reach this second basic objective, other activities will be implemented and strengthened. PAHO/WHO will provide the technical cooperation through PANAFOTSA.

TOTAL	12	12	12	TOTAL	PR	45,490	47,690	45,920
P-4 COUNTRY CONSULTANT .0628	PR	12	12	12	PERSONNEL-POSTS	39,475	41,675	43,905
				DUTY TRAVEL	6,015	6,015	6,015	

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CHILE-4100, NURSING SERVICES

The reorganization of the health services system aids in defining the nursing subsystem as well as in the specification and assignment of duties in this professional field which is characterized by an extreme shortage of trained personnel. The purpose of this project is to cooperate in defining the responsibilities of the nursing subsystem, in organizing the subsystem, and formulating its regulations and programs. The special focus of the subsystem is that of strengthening the operational units in the expansion of health services coverage, with special emphasis on primary care.

TOTAL		2	1	1	TOTAL	PR	12,520	5,655	5,520
CONSULTANT MONTHS	PR	2	1	1	PERSONNEL-CONSULTANTS		5,400	3,000	3,400
TOTAL		6	3	6	SEMINAR COSTS		2,500	-	-
					FELLOWSHIPS		4,620	2,655	6,120
FELLOWSHIP MONTHS	PR	6	3	6					

CHILE-4500, REHABILITATION

In Chile there is a need to coordinate, integrate and expand rehabilitation activities. The national commission established at the ministerial level, has designed a national plan which sets up goals and purposes, including a strategy for obtaining the desired coverage through the use of specialized resources.

The purposes of this project are to contribute to the attainment of the goals which have been formulated and to cooperate in training human resources in the area, especially those people who will direct the execution of the programs.

TOTAL		1	1	1	TOTAL	PR	7,320	8,310	9,520
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		6	6	6	FELLOWSHIPS		4,620	5,310	6,120
FELLOWSHIP MONTHS	PR	6	6	6					

CHILE-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purpose of this project is to cooperate with the Government in identifying problem areas and in formulating policies and strategies in the field of health care, as well as to coordinate and support all PAHO/WHO programs in the country, providing technical and administrative cooperation for the development of regional and interregional programs. Among the activities to be developed, one noteworthy program is the distribution of PAHO/WHO documentary material and the printing and distribution of the material produced by the different PAHO/WHO programs in the country.

TOTAL		36	36	36	TOTAL	PR	95,050	104,500	110,350
P-5 PAHO/WHO REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		56,170	64,735	69,080
.0944					DUTY TRAVEL		2,000	2,000	2,000
G-7 ADMINISTRATIVE ASSISTANT	PR	12	12	12	COMMON SERVICES		36,880	37,765	39,270
.4712									
G-5 SECRETARY	PR	12	12	12					
.4823									

CHILE-5100, DEVELOPMENT OF HEALTH SERVICES

In the reorganization of the country's health services system, the Ministry of Health provides guidance for the activities being developed in each one of the thirteen regions into which the country has been divided. A regionalized health services system has been chosen as the strategy for increasing efficiency and expanding the coverage of the health services to rural and extremely poor areas.

The purpose of this project is to cooperate in designing and developing the information and evaluation system; in the analysis of the basic human resources needed for the proper functioning of the operational service units; and in formulating and implementing a maintenance policy for physical plants and equipment.

TOTAL		12	12	12	TOTAL	WR	81,850	87,165	94,280
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		26,000	42,200	45,700
4.4824					PERSONNEL-CONSULTANTS		24,300	18,000	20,400
TOTAL		9	6	6	DUTY TRAVEL		1,000	1,000	1,000
CONSULTANT MONTHS	WR	9	6	6	SEMINAR COSTS		10,000	9,000	9,000
TOTAL		15	9	9	FELLOWSHIPS		11,550	7,965	9,180
FELLOWSHIP MONTHS	WR	15	9	9	GRANTS		5,000	5,000	5,000
					COURSE COSTS		4,000	4,000	4,000

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CHILE-6000, EDUCATION IN HEALTH SCIENCES

In relation to the size of the population, the amount of professional manpower for health care is very small. The reorganization of the health services system will allow an estimation of the quantity and quality of manpower required and will make existing and future teaching institutions responsible for training manpower. The purpose of this project is to strengthen health sciences educational institutions so as to increase the quantity, quality and adequate distribution of manpower training.

TOTAL		6	4	4	TOTAL	WR	63,460	54,320	62,300
CONSULTANT MONTHS	WR	6	4	4	PERSONNEL-CONSULTANTS		16,200	12,000	13,600
TOTAL		38	32	35	SEMINAR COSTS		7,300	6,000	6,000
FELLOWSHIP MONTHS	WR	38	32	35	SUPPLIES AND EQUIPMENT		6,700	5,000	5,000
					FELLOWSHIPS		29,260	23,320	35,700
					GRANTS		4,000	3,000	2,000

CHILE-6100, TRAINING IN PUBLIC HEALTH

The system of health services being designed by the country requires, at its different levels, personnel trained in health administration and the management of public health activities. Graduate training in these subjects is provided by the Department of Public Health and Social Medicine of the University of Chile, which should change its curriculum and improve its teaching staff in order to meet the needs outlined. The purpose of this project is to strengthen public health training to respond to the needs described above.

TOTAL		1	1	1	TOTAL	PR	36,260	27,545	33,800
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		28	17	20	SEMINAR COSTS		2,500	3,000	3,000
FELLOWSHIP MONTHS	PR	28	17	20	SUPPLIES AND EQUIPMENT		1,500	1,500	2,000
					FELLOWSHIPS		21,560	15,045	20,400
					GRANTS		8,000	5,000	5,000

CHILE-6400, SANITARY ENGINEERING EDUCATION

The provision of potable water supplies, sewerage systems, and urban solid waste disposal systems, as well as conservation of natural resources such as water, air, soil and food, demand more and more professional, technical, and auxiliary staff specialized in these aspects.

The purposes of this project are to strengthen sanitary engineering and environmental sciences education through instruction and research, in order to meet the demand for specialists in these subjects and to contribute, through the distribution of information, to keeping professionals and technicians in the fields of sanitary engineering and environmental sciences up-to-date on the latest progress in their fields.

TOTAL		1	1	1	TOTAL	WR	18,420	18,255	22,120
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		6	3	6	SEMINAR COSTS		-	1,500	1,500
FELLOWSHIP MONTHS	WR	6	3	6	SUPPLIES AND EQUIPMENT		4,100	4,100	4,100
					FELLOWSHIPS		4,620	2,655	6,120
					COURSE COSTS		7,000	7,000	7,000

CHILE-6601, CENTER FOR ORAL PATHOLOGY

Oral pathology in the country is considered to have reached a high level of achievement, although there are no precise detailed data on this aspect. In order to obtain these data and to provide guidance in the development of adequate dental services as a part of the regional system of health services, the Reference Center for Oral Pathology has been created in Santiago, as the result of an agreement made by the Government of Chile, the University of Chile and PAHO/WHO.

TOTAL		1	1	1	TOTAL		6,751	10,155	8,460
CONSULTANT MONTHS	PR	1	1	1	SUBTOTAL	PR	5,010	10,155	8,460
TOTAL		3	3	3	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
FELLOWSHIP MONTHS	PR	3	3	3	SEMINAR COSTS		-	2,500	-
					SUPPLIES AND EQUIPMENT		-	2,000	2,000
					FELLOWSHIPS		2,310	2,655	3,060
					SUBTOTAL	PM	1,741	-	-
					SUPPLIES AND EQUIPMENT		1,741	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CHILE-7300, BACTERIOLOGICAL INSTITUTE

The Bacteriological Institute of Chile is the Central Reference Laboratory for the country. As such, its duties are to provide specialized laboratory diagnosis and reference services; and training in laboratory testing to serve as the official laboratory for the production of biologicals, sera, and vaccines for human use, and reagents for the diagnosis and the development of certain chemical preparations; to serve as the laboratory for federal inspection of pharmaceutical products and cosmetics; to serve as the laboratory for inspection of water, beverages, milk, and food; to serve as a standardizing body by providing technical advice, supervising the national system of laboratories and standardizing the techniques used, to develop applied research in health problems and operational problems; and to train the personnel required by health laboratories in the country.

This project, began in 1974. Laboratory installations and diagnostic methods, production and inspection of biological products and services provided by the national laboratory system are being modernized. Progress to date has been excellent but has been localized within the Bacteriological Institute. The stage has now been reached where efforts should be extended to include network and peripheral laboratories, so as to allow adequate clinical and public health laboratory coverage for the entire country.

TOTAL		24	36	36	TOTAL	UNDP	216,240	274,656	176,920
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P-5 PROJECT MANAGER	UNDP	12	12	12	PERSONNEL-POSTS		69,120	116,600	128,320
4.3846					PERSONNEL-CONSULTANTS		42,000	30,000	9,000
P-4 BIOLOGICALS EXPERT	UNDP	-	12	12	UNDP DIRECT COSTS		-	4,000	-
4.4642					DUTY TRAVEL		2,000	1,350	2,700
G-5 SECRETARY	UNDP	12	12	12	SUPPLIES AND EQUIPMENT		79,250	70,082	15,000
4.4257					IN-SERVICE TRAINING		7,200	-	-
TOTAL		12	7	2	FELLOWSHIPS		14,170	40,224	13,200
-----		-----	-----	-----	GROUP TRAINING		-	8,400	7,200
CONSULTANT MONTHS	UNDP	12	7	2	MISCELLANEOUS COSTS		2,500	4,000	1,500
TOTAL		18	45	13					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	UNDP	18	45	13					

COLOMBIA

Colombia, with an area of 1,138,338 km² and an average population density of 21 inhabitants per square kilometer, is located in the northwest corner of South America. It has an irregular topography, extensive coastline on the Pacific and the Caribbean, and four large plains areas - the west coast, the Cauca Valley, the Magdalena Valley, and the eastern plains - separated by three high mountain ranges which are oriented north-south. Because of the foregoing characteristics, there are five thermal zones.

Administratively, it is divided into 22 Departments, five Intendancies, four Commissariats, and the Special District of Bogotá. It is a unitary and democratic republic in which the Executive Power is vested in a President elected by universal suffrage, who appoints the Governors, Intendants, and Commissioners of all the administrative divisions. There is also a Legislative Power, composed of a Senate and a House of Representatives, the Departmental Assemblies, and the Municipal Councils; and a Judicial Power, made up of the Supreme Court, the Departmental Tribunals, and the Municipal Courts.

The population in 1975 was estimated at 24 million inhabitants, representing a doubling of the population in a period of 25 years. The long-term downward trend in overall mortality (7.8%) and in child mortality has been maintained, although the level of the latter (60-70 per 1,000 live births) continues to be appreciably high, and is the reason why many of the priority efforts of the sector are directed towards care for groups of minors.

Recent studies show a clear decline in the birth rate, placing it at 33.0 per 1,000 inhabitants; in terms of the potential demand for maternal-infant health services, this represents approximately 800,000 cases per year. This new trend in the birth rate is the most important explanation of the noteworthy drop in the rate of growth of the population, decreasing from 3.2% in the period 1951-1964 to 2.4% between 1964 and 1976. As regards the age structure, 44.2% of the inhabitants are under 15 years of age, and 13.6% are 45 years of age and over. These figures, taken from the 1973 census, show a process of maturation of the population since 1964, in the sense of a proportional increase of adults and decrease of minors, as a logical consequence of the birth and death trends and of the increase in life expectancy (60.9 years).

However, this averaging of the situation for the country as a whole conceals the appreciable differences between the urban and rural areas. It is clear that the positive aspects of the process of demographic change have basically been generated in the urban population.

In recent years, the GDP has been growing by 4.4% annually, and in 1975 it was equivalent to US\$527 per capita. Agriculture is the predominant sector, representing 30% of the GDP. However, the industrialization process has been strengthened over the last 30 years. It is basically centered in the textile, chemical-pharmaceutical, metal-mechanical, petrochemical, rubber, and manufacturing areas. The principal export is coffee, with other exports having been encouraged in recent years.

In 1973, 24% of all deaths occurred among children under one year of age, and 37.4% were in the under five-year-age group, high proportions despite the notorious underreporting for these groups in the rural areas. The latter ratio was reduced by 10% over the previous 10 years. On the other hand, it should be pointed out that the proportional death rate for persons over 50 years of age (one of the indicators most sensitive to levels of health and hence to the standard of living) has been progressively increasing, from 31% in 1965 to 40% in 1975.

The above-mentioned increase in the proportion of deaths among adults is largely explained by the presence of heart and cerebrovascular diseases among the five major causes of death, confirming the growing importance which should be given to health programs for adults.

Gastrointestinal diseases and pneumonias persist as the major causes of death. Vitamin deficiency and other deficiency problems are among the five main causes of death in all age groups up to 15 years of age.

A review of the health organizations of the country indicates that problems of the genito-urinary system, gastrointestinal diseases, helminthiasis, other infectious and parasitic diseases, and problems of the respiratory system place the greatest demand on outpatient medical care.

The main causes for hospitalization are uncomplicated births, abortions, gastroenteritis, and some diseases of the genito-urinary system; there was no change in this order between 1964 and 1973. In this regard, the Government has begun to carry out a careful strategy of hospital care for higher-risk patients, with particular attention to the maternal-child program.

Communicable diseases, an area of special interest for the sector because of their serious consequences and rapid transmission, have shown a decreasing trend over time, with some oscillations, mainly as a consequence of the continuing vaccination programs and of the system of epidemiological surveillance and control. There was an impressive impact on measles in 1975, with a 70% reduction in the rate of new cases compared with the previous year.

National studies provide the following panorama with regard to malnutrition: two-thirds of the children under five years of age have some degree of malnutrition and 21% suffer from severe degrees; the adult population consumes only 85% of the daily caloric requirement and 78% of the necessary proteins, with lower levels obtained in the rural areas; and approximately one-third of the general population shows symptoms of iron-deficiency anemia.

Approximately 75% of the population living in urban areas has drinking water and sewerage disposal services; 45% of the population of communities of from 50 to 2,500 inhabitants has drinking water and 13.3% has sewerage systems; there is garbage collection in 75% of the intermediate-size communities, but in 60% of these it is dumped in open areas without any further sanitation control. A marked decrease has been achieved in the incidence of canine rabies, as well as important progress in the program of vaccination against Venezuelan equine encephalitis. As regards hygienic control of food, an adequate level of efficiency has been achieved only in the supervision of the meat-freezing slaughterhouses involved in the export trade. Systematic measurement and control of air pollution is carried out in the six most industrialized cities, but only the cement and acid industries have specific controls over waste disposal.

There are certain imbalances among critical human resources, especially as regards dentists and nurses. For the country as a whole, there is an average of one doctor for every 2,000 population, one dentist for every 7,300, one professional nurse for every 9,300, and one nurse's aide for every 900 persons. The basic problem lies in the inadequate distribution of these resources, since more than 70% is located in the departmental capitals, with Bogotá having a considerably greater supply than the rest of the cities. New strategies for large-scale training of auxiliary personnel and for promotion of systems for reassignment of functions are being carried out as alternative solutions.

There is a total of 2,340 medical care institutions; of these institutions, 74% belong to the official subsector, 6% to the Social Security system, and 20% to the private sector. The inpatient institutions have a total of 50,632 beds, a resource which, despite its growth in 1974 and 1975 (1%), has decreased from 1.9 to 2.2% in the availability per inhabitant because of the greater proportional growth of the population.

The 1975 federal and state budgets contributed COL\$8 billion (US\$230 million) to the health sector, of which 75% was used for care for individuals and 25% for environmental programs. The resources channeled by the State through the Ministry of Health and its various agencies are aimed at 75% of the population, but only 39% of this population received any professional care during 1976; 20% of the population to be covered does not have access to the services offered because the people are scattered throughout the rural areas of the country. The Social Security and Welfare Systems provide health services to 10% of the population, and the private sector provides the remaining 15%.

Health policies aim: 1) to convert the health sector into an instrument of social progress in order to achieve the highest degree of health compatible with the level of development of the nation, eliminating inequalities and providing for the access of all inhabitants to health services; 2) to utilize the National Health Plan and System to increase health services to all population groups, preference being given to persons living in the rural areas, to those who make up the marginal populations of the cities, and to the people in remote areas; 3) to regionalize health care throughout the country, within the criteria of policy centralization and of administrative decentralization, strengthening the concept of "hospital" as the basic unit for each regional and local level in order to provide equivalent, permanent, and timely services; 4) to promote the development of the Unified National Health System, which includes all of the organizations, agencies, institutions, and entities - whether at the national, departmental, or municipal level - whose specific purpose is to provide for the health of the people, whether or not they receive contributions from the Public Treasury; 5) to incorporate the associated and related entities into a National Health Plan in such a way that all of them will be appropriately coordinated for the harmonious and orderly carrying out of the health policy set by the Government; 6) to place the financial resources which may be destined for health programs and activities throughout the country under the control and supervision of the State so that they will be in agreement with the purposes and objectives of the National Health Plan; 7) to allocate all resources from external sources which may be channeled by official agencies for health programs and activities, plus the resources of the special budgets and the additional contributions of the Government, to financing the priority health programs which may be decided upon in the carrying out of the National Health Plan; 8) to give priority to programs as a function of the risk which the community faces, giving higher priority to programs for population groups with a higher proportion of persons under 15 years of age, for the maternal-infant nucleus, and for the labor nucleus; 9) to strengthen the infrastructure programs necessary for the complete carrying out of the programs and activities of the health services; 10) to give direction to the education, training, and specialized training of human resources for the constituting of multidisciplinary teams, placing emphasis on a proportional increase in technical and auxiliary personnel, and seeing to it that the number and distribution of professionals is more in line with the true needs of the country; 11) to have all those who work in the national health system covered by a uniform personnel statute, to the extent that the characteristics of each entity so permit; 12) to organize the community so as to obtain its active participation in the defining, execution, and evaluation of the programs and activities included in the National Health Plan; 13) to ensure the conservation and improvement of an environment satisfactory for human life, seeing to it that actions affecting the ecology are carried out in cooperation with other related sectors; and 14) to harmonize the execution of the national health policy with the content of the respective policies of the different sectors, in order to improve its contribution to the social and economic development of the nation.

This does not mean that the Government will aim its efforts exclusively at the groups, areas, or sectors mentioned to the neglect of other objectives, but that more human, technical, and financial resources than in the past will be channeled towards the areas selected.

The National Health System was established by Decree Law 056 of 1975, and it coordinates all of the institutions which provide health services to the community. Included are those of the official subsector and the Social Security and Welfare entities; it also coordinates the functions of the private subsector. This instrument is conceived of as a set of elements and mechanisms for organizing manpower and installed capacity for the fundamental purpose of expanding and improving the quality of services to individuals and the environment they live in.

The management of the National Health System has three administrative levels: national, represented by the Ministry of Health, with functions in the areas of policy and standards, planning, coordination, control and evaluation; sectional, made up of the sectional health services, with functions in the areas of adapting policies and standards, programming, surveillance, control and evaluation; and regional, made up of the regional entities and hospitals (in the regional capitals), with functions in the areas of programming, execution, surveillance, and control. This last level, in addition to serving its own purposes as a health institution, is responsible for all of the local health organizations which operate in the area.

The system of regionalization results from viewing the country as a composite of functional units, each covering a specific geographic area and with its corresponding group of local operational institutions and agencies, aggregated for the specific purposes of programming, execution, and administration. In each of the regions, services are provided at the following operational levels or levels of complexity: the local level (and within it the rural sub-level), the regional level and the university level. The supplying of human, physical, and financial resources will be gradually increased, from the rural level, whose basic unit is a health volunteer, up to the university level, which has highly specialized personnel and resources available to it. The goal, when the system is in full operation, is a more efficient utilization of resources and the consequent broadening of the coverage of the health system, through providing for the care of the patient at the appropriate level called for by his condition.

Various programs for the planned execution of the activities in this field are under way: for organization, as such, under which action has gone forward in designing and implementing the use of standard organizational models at the national, sectional, regional, and local levels; for personnel administration, which has included the preparation of the General Manual for Post Classification; for supply administration, which has included the preparation and initial implementation of the Manual of Procedures and the General Catalog; for communications, which covers the designing of a long-distance communications system to interconnect the different levels and all of the operational institutions; and for administrative management training, which involves the organizing of the program of training in the use of the new systems, methods, and procedures.

The fundamental components of the National Health System are known as subsystems, through which the actual operation of the system is to be achieved. They include planning, which aligns the policies, programs, procedures and targets of the system with the objectives established in the National Development Plan and, for that purpose, provides for the internal coordination of all the agencies and organizations connected with the sector; information, which facilitates the prompt collection of information essential for an appropriate evaluation and planning process through the standardization of statistical records, clinical histories, and the design of a master sample for periodical surveys; supplies, which regulates the procurement and distribution of drugs, medical and surgical material, material for laboratories, and general services, taking into account the programs of the health sector organizations and agencies; investments, which centralizes the sector's investments, including construction, equipment, and personnel training (in general, efforts will be made to make more rational use of existing resources through maximum utilization of installed capacity); personnel, in which the most important operational instrument is the Uniform Health Personnel Statute (Decree-Law 694/75) and its regulations, and the post classification and post description manuals; and research, which sets priorities in health research, determines the participation of the different entities or groups, and distributes the results obtained.

The country has initiated a process of overall planning by levels in which priority is given to the rural and the peripheral urban areas in the formulation of the National Health Plan. Provision is made for their articulation with the other levels - regional and university - which make up the second phase of the Plan. The first phase is in execution; its goal is to provide health services to some 36% of the population considered inaccessible, located in rural and slum areas. From 1975 on, the intention is to cover 100% (9 million people) in 10 years.

The services offered at this level of the System are provided (a) at home, by volunteer health workers through seven basic activities (health services to individuals, which include supervised medical care, providing of medication, nutrition education and supplements, and immunizations; and environmental health services, which include water supply, sanitary disposal of wastes, the hygienic disposal of garbage, and control of zoonoses); and (b) at the health post, by medical and paramedical personnel. This primary action is subsequently meshed with the other levels of care, that is, the local, regional, and university hospitals.

These seven basic services are aimed at controlling the pathologies which occur most frequently in this population group, namely, parasitic and communicable diseases and malnutrition.

For the operation at this level, two types of care have been specified: without institutional beds, consisting of the volunteer health worker (the first link of the National Health System E-1) and the health post with its auxiliaries and/or nurse's aides (the second link of the System E-2), supervised by a doctor who is present periodically (E-3); and with institutional beds, in the local hospital, which adds to all of the less complicated duties the basic clinical specialties mentioned earlier (internal medicine, obstetrics, and pediatrics), the receiving of patients from health posts and centers, and the referral of those who require more specialized care to the regional hospitals, or even directly to the university hospital.

Each health volunteer is responsible for an average of 200 homes, involving approximately 1,000 persons. These homes are at a maximum distance of two hours by foot or muleback from the house of the volunteer. The grouping together of six program areas, with their volunteers, constitutes what is known as a MAC (Module for Augmented Coverage). The operation of a MAC costs COL\$1,600,000 (approximately US\$45,000), if there is no infrastructure, that is, when it is necessary to construct the health post and/or to acquire its complete furnishings and to fully train its personnel. The annual cost per person covered is approximately COL\$280 (US\$8) for the first year, and COL\$150 for subsequent years, since the initial investment cost occurs only once.

Other important programs are being carried out which have applications in the national sphere, some with intrasectoral and others with intersectoral responsibilities. Of the former, the following stand out: (a) Law 27/74, whose implementation is the responsibility of the Instituto Colombiano de Bienestar Familiar (ICBF), an independent agency of the Ministry of Health; this law orders ICBF to establish overall care centers for preschool children, in which children will be provided coverage by actions aimed at encouraging their proper growth and their physical, psychological, and social development; and (b) the Investment Plan for Water Supply and Sewerage Systems, 1975-1978, which will stimulate the self-development of the individual organizations on the basis of an administrative decentralization which encourages local participation in planning and in the solving of local problems. In addition to the construction of water and sewerage systems, it includes planning for chlorination and fluoridation, and for the investigation of subsurface water sources.

Intersectoral programs are a vital part of the General Development Plan, 1974-1978, within which the health sector has been given a high priority.

The National Food and Nutrition Plan (PAN) will get under way through a strategy which involves agricultural development, industrial development with technology appropriate to the Colombian situation, and income distribution. It contemplates a series of actions, in various sectors and areas, which make up an integrated complex of policies regarding the production, consumption, and improved biological utilization of those products which can be most efficient in solving the food and nutrition problems.

The primary objective of PAN will be to achieve a progressively improved nutritional situation for the less favored socioeconomic classes through the adequate provision of nutritional foods which, supported by programs for the direct distribution of certain nutrients, will improve the health of the people, especially the infant population. Its basic components are food production, the reorganizing of the food marketing system, the national nutrition education program, programs which encourage an optimum biological utilization of food (National Rural Health Program, National Plan for Water Supply and Sewerage Systems), and programs for the subsidized distribution of food.

Integrated Rural Development is a program which is part of the food production policy of PAN and is aimed at the areas with a greater concentration of very small land-holdings where important increases in agricultural and livestock production can be achieved. This would make it possible to improve levels of production and of family incomes, and consequently, increase the capacity for food consumption. Its principal elements are the channeling of credits to rural workers, the technical assistance program, construction of silos and storage centers, provision of health services under the rural plan, construction of penetration roads, rural electrification, and environmental sanitation.

The Border Development Program has as its primary objective the incorporation of the border areas into the socioeconomic development process of the country, which will contribute to interregional integration, in order to guarantee the effective presence of the State in those areas. It foresees large-scale vaccination, the construction and furnishing of health posts and centers, rural water supply and sewerage systems, and supply of drinking water to the scattered population.

The Marginal Urban Areas Program is carried out through the Neighborhood Development Centers, which are entities at which services are to be provided in an integrated fashion, administered by the community itself, covering education; health; recreation; security and protection; guidance in legal, family, and labor matters; an operating market; a labor exchange; and vocational training shops.

COLOMBIA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	1,784,096	83.5	936,330	65.9	559,695	59.8
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SERVICES TO INDIVIDUALS	1,551,185	72.5	641,880	45.1	248,560	26.6
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COMMUNICABLE DISEASES						
0200 MALARIA	163,545	7.6	169,415	11.9	181,120	19.4
0500 LEPROSY	3,000	.1	3,000	.2	-	-
0700 AEDES AEGYPTI-BORNE DISEASES	67,440	3.2	67,440	4.7	67,440	7.2
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	1,317,200	61.6	402,025	28.3	-	-
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ENVIRONMENTAL HEALTH SERVICES	151,863	7.1	259,535	18.3	269,700	28.8
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	82,110	3.8	89,805	6.3	109,430	11.7
2100 WATER SUPPLY AND EXCRETA DISPOSAL	18,623	.9	4,155	.3	4,810	.5
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	7,010	.3	8,155	.6	5,810	.6
3200 FOOT-AND-MOUTH DISEASE	44,120	2.1	46,320	3.3	48,550	5.2
3300 ZOONOSSES	-	-	111,100	7.8	101,100	10.8
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COMPLEMENTARY SERVICES	81,048	3.9	34,915	2.5	41,435	4.4
4200 LABORATORIES	20,910	1.0	23,915	1.7	29,330	3.1
4300 EPIDEMIOLOGICAL SURVEILLANCE	7,655	.4	11,000	.8	12,105	1.3
4500 REHABILITATION	52,483	2.5	-	-	-	-
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II. DEVELOPMENT OF THE INFRASTRUCTURE	354,294	16.5	485,155	34.1	376,125	40.2
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HEALTH SYSTEMS	291,334	13.6	244,275	17.2	267,445	28.6
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	104,790	4.9	108,770	7.7	115,380	12.3
5200 MEDICAL CARE SYSTEMS	54,345	2.5	74,000	5.2	85,745	9.2
5300 PLANNING	51,835	2.4	56,850	4.0	60,520	6.5
5400 STATISTICS AND INFORMATION SYSTEMS	46,497	2.2	4,655	.3	5,800	.6
5500 MANAGEMENT SYSTEMS	33,867	1.6	-	-	-	-
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DEVELOPMENT OF HUMAN RESOURCES	32,642	1.5	226,570	15.9	97,560	10.4
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	26,320	1.2	35,470	2.5	45,060	4.8
6600 DENTISTRY	6,322	.3	-	-	-	-
6900 OTHER	-	-	191,100	13.4	52,500	5.6
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PHYSICAL RESOURCES	20,308	.9	3,655	.3	4,060	.4
7400 MAINTENANCE OF HEALTH CARE FACILITIES	20,308	.9	3,655	.3	4,060	.4
8900 RESEARCH COORDINATION	10,010	.5	10,655	.7	7,060	.8
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GRAND TOTAL	2,138,390	100.0	1,421,485	100.0	935,820	100.0
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*LESS THAN .05 PERCENT

COLOMBIA
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
	\$				\$			\$	\$	\$	\$	\$
1977												
PAHO---PR	359,245	60	36	1	236,290	19,645	43	33,110	15,000	3,000	15,000	37,200
PW	15,013	-	-	3	7,000	591	8	6,122	1,300	-	-	-
PH	8,322	-	-	-	-	-	-	-	-	6,322	-	-
WHO---WR	302,005	60	-	5	167,900	13,500	18	13,860	7,000	93,145	6,600	-
UNDP	138,605	-	-	12	38,500	-	31	54,676	5,000	37,500	-	2,929
UNFPA	1,317,200	-	-	10	30,000	-	-	-	283,918	645,282	-	358,000
TOTAL	2,138,390	120	36	31	479,690	33,736	100	107,768	312,218	785,249	21,600	398,129
PCT. OF TOTAL	100.0				22.5	1.6		5.0	14.6	36.7	1.0	18.6
1978												
PAHO---PR	440,695	60	36	1	249,630	22,145	54	47,790	22,715	46,965	15,000	36,450
WHO---WR	276,565	60	-	4	179,100	15,750	15	13,275	10,500	50,440	7,500	-
UNDP	302,200	-	-	23	92,000	-	92	81,800	-	128,400	-	-
UNFPA	402,025	-	-	15	46,557	-	-	-	156,269	159,973	-	39,226
TOTAL	1,421,485	120	36	43	567,287	37,895	161	142,865	189,484	385,778	22,500	75,676
PCT. OF TOTAL	100.0				39.9	2.7		10.1	13.3	27.1	1.6	5.3
1979												
PAHO---PR	428,635	60	36	1	263,260	24,645	62	63,240	25,240	2,000	12,000	38,250
WHO---WR	353,585	60	-	3	191,200	18,000	29	29,580	11,650	94,905	8,250	-
UNDP	153,600	-	-	2	9,000	-	82	83,200	-	61,400	-	-
TOTAL	935,820	120	36	6	463,460	42,645	173	176,020	36,890	158,305	20,250	38,250
PCT. OF TOTAL	100.0				49.5	4.6		18.8	3.9	16.9	2.2	4.1

PAHO-PR-REGULAR BUDGET
PW-COMMUNITY WATER SUPPLY
PA-INCAP - REGULAR BUDGET
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
PG-GRANTS AND OTHER CONTRIBUTIONS
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
PJ-GRANTS RELATED TO CAREC
WHO-WR-REGULAR BUDGET
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
WO-GRANTS AND OTHER FUNDS

COLOMBIA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA IV CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA IV (PR)	<u>Program Planning and General Activities</u>			90	61,260	90	64,875	90	67,960
	Area Representative	0.0294	D-1						
AMRO-1440 (WR)	<u>Nutrition</u>			15	3,555	20	4,615	25	5,180
	Medical Officer	4.0877	P-4						
AMRO-2940 (PR)	<u>Regional Development</u>			30	5,655	30	6,055	35	7,240
	Sanitary Engineer	0.4266	P-5						
AMRO-3140 (WR)	<u>Animal Health and Veterinary Public Health</u>			15	1,835	15	2,840	20	4,055
	Veterinarian	4.3088	P-4						
AMRO-4140 (PR)	<u>Nursing</u>			10	2,555	15	3,555	10	3,015
	Nurse	0.0893	P-4						
	<u>Total All Programs</u>			160	74,860	170	81,940	180	87,450

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

COLOMBIA - DETAIL

COLOMBIA-0200, ERADICATION OF MALARIA AND Aedes Aegypti

The malaria program, in which little progress was made in 1976, continued to be plagued by technical and financial problems. Because of lack of funds, malaria control measures were limited primarily to areas in which the disease is highly endemic and those that are of social and economic importance. A new plan of operations was prepared for 1977 and provides for the use of more effective measures in each epidemiological area.

The activities of the Aedes aegypti program were also reduced in 1976 because of financial problems, and the result was that large tracts of the country were reinfested. Efforts are being made to ensure better use of the resources available and thus prevent outbreaks of yellow fever and dengue in the urban areas.

TOTAL		48	48	48	TOTAL		230,985	236,855	248,560
P-5 MEDICAL OFFICER	PR	12	12	12	SUBTOTAL	PR	50,275	97,320	56,460
.2121									
P-3 ENTOMOLOGIST	WR	12	12	12	PERSONNEL-POSTS		47,275	49,855	52,460
4.2184					DUTY TRAVEL		3,000	3,500	4,000
P-2 SANITARIAN	WR	24	24	24	SUPPLIES AND EQUIPMENT		-	43,965	-
4.040C 4.040Z					SUBTOTAL	WR	180,710	139,535	192,100
TOTAL		1	-	-					
CONSULTANT MONTHS	WR	1	-	-	PERSONNEL-POSTS		80,400	86,700	93,600
TOTAL		3	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
FELLOWSHIP MONTHS	WR	3	-	-	DUTY TRAVEL		9,000	10,500	12,000
					SUPPLIES AND EQUIPMENT		84,300	40,335	84,300
					FELLOWSHIPS		2,310	-	-
					COURSE COSTS		2,000	2,000	2,200

COLOMBIA-0500, LEPROSY CONTROL

In harmony with the Ten-Year Health Plan for the Americas, national policy in Colombia calls for a reduction in the incidence and prevalence of leprosy and a concomitant decline in disablement. Since the microbiology of leprosy still contains many unknowns, experimental research on human and murine leprosy in laboratory animals, including inoculation, protection and treatment, is stressed.

TOTAL	PR	3,000	3,000	-
GRANTS		3,000	3,000	-

COLOMBIA-1300, MATERNAL AND CHILD HEALTH SERVICES AND FAMILY WELFARE

Under this project it is proposed to extend coverage of maternal and child health services and bring them under the hospital services of the national health system. This requires that the respective technical and administrative standards be drawn up. It is further proposed to train new personnel for the country's health teams by means of activities such as short courses, workshops and seminars.

A proposal for extension of the project is being prepared.

TOTAL		10	15	-	TOTAL	UNFPA	1,317,200	402,025	-
CONSULTANT MONTHS	UNFPA	10	15	-	PERSONNEL-CONSULTANTS		30,000	46,557	-
					CONTRACTUAL SERVICES		80,000	39,226	-
					SEMINAR COSTS		5,000	-	-
					SUPPLIES AND EQUIPMENT		645,282	159,973	-
					COURSE COSTS		278,918	156,269	-
					LOCAL PERSONNEL COSTS		278,000	-	-

COLOMBIA-2000, ENVIRONMENTAL SANITATION

The purpose of this project, which covers all environmental sanitation activities, is to cooperate in achieving broader coverage and improvement in the quality of basic sanitation services for urban and rural inhabitants, control of pollution, and involvement of the health sector in regional development.

TOTAL		24	24	24	TOTAL	WR	82,110	89,805	109,430
P-4 SANITARY ENGINEER	WR	24	24	24	PERSONNEL-POSTS		74,000	80,400	87,400
4.035Z 4.0410					DUTY TRAVEL		4,500	5,250	6,000
TOTAL		3	3	14	SUPPLIES AND EQUIPMENT		500	500	500
FELLOWSHIP MONTHS	WR	3	3	14	FELLOWSHIPS		2,310	2,655	14,280
					GRANTS		800	1,000	1,250

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COLOMBIA-2100, WATER AND SEWER ADMINISTRATION

This project proposes to expand and improve the quality of drinking water supplies and sewer services in urban and rural areas of the country, and develop the institutional, administrative and technical areas of the operating agencies concerned, as well as the human resources working in this field. This requires fully coordinated action by the Environmental Sanitation Office of the Ministry of Health, the Instituto Nacional de Fomento Municipal, public municipal enterprises and the Instituto Nacional de Salud.

TOTAL		3	-	-	TOTAL		18,623	4,155	4,810
CONSULTANT MONTHS	PW	3	-	-	SUBTOTAL	PW	15,013	-	-
TOTAL		11	3	3	PERSONNEL-CONSULTANTS		7,000	-	-
FELLOWSHIP MONTHS	PW	8	-	-	DUTY TRAVEL		591	-	-
FELLOWSHIP MONTHS	WR	3	3	3	SEMINAR COSTS		1,300	-	-
					FELLOWSHIPS		6,122	-	-
					SUBTOTAL	WR	3,610	4,155	4,810
					SUPPLIES AND EQUIPMENT		500	500	500
					FELLOWSHIPS		2,310	2,655	3,060
					GRANTS		800	1,000	1,250

COLOMBIA-3100, VETERINARY PUBLIC HEALTH

The purpose of this project is to control zoonotic diseases that affect the country's livestock production and productivity and spread to humans with repercussions on the health and well-being of the population. Sanitary deficiencies exist in the production, processing, storage, marketing and consumption of foodstuffs; food-borne diseases and poisoning create problems of an economic, social and sanitary nature. The national program for the control of canine rabies is in the consolidation phase in urban areas and is being extended to rural areas; in addition, a national meat hygiene program has been set up.

TOTAL		1	1	-	TOTAL	WR	7,010	8,155	5,810
CONSULTANT MONTHS	WR	1	1	-	PERSONNEL-CONSULTANTS		2,700	3,000	-
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	WR	3	3	3	GRANTS		2,000	2,500	2,750

COLOMBIA-3200, FOOT-AND-MOUTH DISEASE CONTROL

Under this project it is proposed to strengthen and expand animal health programs aimed at the control of foot-and-mouth disease in order to increase the quantity and quality of livestock production, contribute to the growth of export markets, reduce the threat of spread of the disease to countries which are free of it, and lay the groundwork for its eradication.

TOTAL		12	12	12	TOTAL	PR	44,120	46,320	48,550
P-4 COUNTRY CONSULTANT 3,153	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		4,645	4,645	4,645

COLOMBIA-3301, ZOONOSSES AND FOOD CONTROL

The objectives of the project are the control and/or eradication of the main diseases which affect animal health and husbandry, including zoonosis, and improvement of food hygiene and inspection; training of professional, technical and auxiliary personnel to plan, administer and execute programs involving animal health, zoonosis, and food hygiene and inspection by means of courses, seminars and fellowships; and improvement of the existing infrastructure with a view to executing the programs satisfactorily.

TOTAL		-	3	2	TOTAL	UNDP	-	111,100	101,100
CONSULTANT MONTHS	UNDP	-	3	2	PERSONNEL-CONSULTANTS		-	12,000	9,000
TOTAL		-	57	50	SUPPLIES AND EQUIPMENT		-	48,400	41,400
FELLOWSHIP MONTHS	UNDP	-	57	50	FELLOWSHIPS		-	50,700	50,700

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COLOMBIA-4200, LABORATORY SERVICES

This project aims to establish a nationwide network of laboratories, with a central standards and reference laboratory which will act as a national training center and continue to produce biologicals and antigens. The laboratories on the other levels will act as support for medical care services and epidemiological surveillance. The National Laboratory of the Instituto Nacional de Salud will continue to conduct experimental research on leprosy.

TOTAL		3	3	3	TOTAL	WR	20,910	23,915	29,330
CONSULTANT MONTHS	WR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		3	3	6	SUPPLIES AND EQUIPMENT		6,500	7,760	8,260
FELLOWSHIP MONTHS	WR	3	3	6	FELLOWSHIPS		2,310	2,655	6,120
					GRANTS		3,000	3,000	3,000
					COURSE COSTS		1,000	1,500	1,750

COLOMBIA-4300, EPIDEMIOLOGY

The purpose of this project is to establish a system of epidemiological surveillance of communicable and noncommunicable diseases in the sectional health services to enable them to analyze the situation on a continuing basis, recommend alternative courses of action, and evaluate the effectiveness of measures taken for prevention and control in the national health system. For this purpose, the program to train health team personnel for the sectional services will continue; vaccinations will be stepped up by placing them under the personal care programs, with a system for the purchase and distribution of biologicals which guarantees optimum quality; attempts will be made to lower the incidence of congenital syphilis and the pelvic complications of gonorrhea; and additional clinics will be provided for the regular treatment of patients with high blood pressure.

TOTAL		3	3	3	TOTAL	WR	7,655	11,000	12,105
FELLOWSHIP MONTHS	WR	3	3	3	SUPPLIES AND EQUIPMENT		1,345	1,345	1,345
					FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		4,000	7,000	7,700

COLOMBIA-4500, MEDICAL REHABILITATION

The goal of this project is to promote coordinated development of rehabilitation services throughout all the institutions of the national health system by improving existing services and establishing these services in institutions where they do not now exist. Furthermore, it is proposed to assist in the training of manpower for the different levels of care by means of national courses and fellowships for specialists.

TOTAL		1	-	-	TOTAL	UNDP	52,483	-	-
CONSULTANT MONTHS	UNDP	1	-	-	PERSONNEL-CONSULTANTS		3,500	-	-
TOTAL		17	-	-	SUPPLIES AND EQUIPMENT		3,000	-	-
FELLOWSHIP MONTHS	UNDP	17	-	-	IN-SERVICE TRAINING		27,208	-	-
					FELLOWSHIPS		13,200	-	-
					MISCELLANEOUS COSTS		575	-	-
					COURSE COSTS		5,000	-	-

COLOMBIA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The primary purpose of this project is to obtain the support of external cooperation and credit agencies for the national health policy of Colombia. The Government is engaged in reorganizing the health sector with a view to increasing the productivity of the resources available and extending health service coverage to the rural areas and shantytowns. It is expected to install the National Health System and to continue activities for the extension of health service coverage to the rural areas; to develop the National Food and Nutrition Plan; to foster the development of information systems and the investment program through the training of personnel; and also to develop the investment program for malaria activities.

TOTAL		48	48	48	TOTAL	PR	104,790	108,770	115,380
P-5 PAHO/WHO REPRESENTATIVE .0396	PR	12	12	12	PERSONNEL-POSTS		60,090	63,570	67,130
G-7 ADMINISTRATIVE ASSISTANT .0395	PR	12	12	12	DUTY TRAVEL		7,500	8,750	10,000
G-6 SECRETARY .4203	PR	12	12	12	COMMON SERVICES		37,200	36,450	38,250
G-2 DRIVER .4257	PR	12	12	12					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COLOMBIA-5200, MEDICAL CARE ADMINISTRATION

The aim of this project is to supplement normative models, with emphasis on the local hospital, in order to achieve coordination and integration in primary care centers, and to develop a regionalized system of services consistent with the various levels of care. Studies will be undertaken to solve problems in critical operational areas of hospital facilities. Personal care programs have reached varying stages of development and therefore specific goals are proposed for tuberculosis, mental health, oral health, occupational health, monitoring of ionizing radiations, geriatrics and leprosy.

TOTAL		12	12	12	TOTAL	PR	54,345	74,000	85,745
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.0391					PERSONNEL-CONSULTANTS		-	-	3,400
TOTAL		-	-	1	DUTY TRAVEL		2,250	2,625	3,000
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
CONSULTANT MONTHS	PR	-	-	1	FELLOWSHIPS		4,620	17,700	22,440
TOTAL		6	20	22	COURSE COSTS		7,000	11,000	12,000
FELLOWSHIP MONTHS	PR	6	20	22					

COLOMBIA-5300, HEALTH PLANNING

The purpose of this project is to draw up and evaluate a national health plan to be implemented by the national health system established under law. The overall objectives include the design of programming methodologies, formulation of an evaluation model, and establishment of intrasectoral and intersectoral coordination procedures, and procedures enabling active involvement of the community in the programming, implementation and evaluation of sectoral actions. The general orientation is in response to national policy for the health sector, which emphasizes as one of its goals expansion of coverage to communities which do not now have adequate regular services.

TOTAL		12	12	12	TOTAL	PR	51,835	56,850	60,520
P-5 HEALTH PLANNER	PR	12	12	12	PERSONNEL-POSTS		47,275	49,855	52,460
.0912					DUTY TRAVEL		2,250	2,625	3,000
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		-	1,715	2,000
FELLOWSHIP MONTHS	PR	3	3	3					

COLOMBIA-5401, REDESIGN OF HEALTH INFORMATION SYSTEMS

The purpose of this project is to support the installation of the national health sciences information subsystem as part of the National Scientific Information System which coordinates the Colombian Fund for Scientific Research and the "Francisco José de Caldas" Special Projects.

Specifically, during the period 1977-1980 the project will focus on the establishment and equipping of libraries at the sectional and regional levels and on the strengthening of the Coordinating Center located in the Directorate of the National Health System. A documentation center on national health systems is being organized as one of the major components of this subsystem, under a three-year project financed by UNICEF.

TOTAL		2	-	-	TOTAL		46,497	4,655	5,800
CONSULTANT MONTHS	UNDP	2	-	-	SUBTOTAL	PR	4,310	4,655	5,800
TOTAL		12	3	3					
FELLOWSHIP MONTHS	PR	3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	UNDP	9	-	-	COURSE COSTS		2,000	2,000	2,740
					SUBTOTAL	UNDP	42,187	-	-
					PERSONNEL-CONSULTANTS		5,250	-	-
					SUPPLIES AND EQUIPMENT		28,500	-	-
					FELLOWSHIPS		7,200	-	-
					MISCELLANEOUS COSTS		1,237	-	-

COLOMBIA-5500, ADMINISTRATIVE DEVELOPMENT OF THE HEALTH SYSTEM

The national program has defined administrative standards for the National Health System for the purpose of ensuring uniform administration and accelerating the installation of extension systems and personnel training. This program will be supplemented by the medical care services of the official subsector and subsequently will be extended to other subsectors and services.

TOTAL		5	-	-	TOTAL	UNDP	33,867	-	-
CONSULTANT MONTHS	UNDP	9	-	-	PERSONNEL-CONSULTANTS		29,750	-	-
					GROUP TRAINING		3,000	-	-
					MISCELLANEOUS COSTS		1,117	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COLOMBIA-6000, DEVELOPMENT OF HUMAN RESOURCES

The objective of this project is to promote the instruction and training of human resources for health programs on a continuing basis as an integral part of the overall planning process for economic and social development, and for the development of planning agencies in the health sector and of institutions to train health sciences personnel.

TOTAL		16	22	28	TOTAL	PR	26,320	35,470	45,060
FELLOWSHIP MONTHS	PR	16	22	28	FELLOWSHIPS		12,320	19,470	28,560
					GRANTS		10,000	10,000	10,000
					COURSE COSTS		4,000	6,000	6,500

COLOMBIA-6601, DENTAL EDUCATION, UNIVERSIDAD DEL VALLE

PAHEF is cooperating in the provision of teaching supplies and equipment for the School of Dentistry at the Universidad del Valle.

TOTAL	PM	6,322	-	-
SUPPLIES AND EQUIPMENT		6,322	-	-

COLOMBIA-6900, CENTER FOR EDUCATION IN HEALTH ADMINISTRATION

The objectives of this project are the planning of the human resources required by the health sector through a stronger inter-sectoral coordination in determining health manpower requirements on the basis of the needs and objectives of the sector; and ensuring the systematic production and utilization of the manpower required.

TOTAL		-	20	-	TOTAL	UNDP	-	191,100	52,500
CONSULTANT MONTHS	UNDP	-	20	-	PERSONNEL-CONSULTANTS		-	80,000	-
TOTAL		-	35	32	SUPPLIES AND EQUIPMENT		-	80,000	20,000
FELLOWSHIP MONTHS	UNDP	-	35	32	FELLOWSHIPS		-	31,100	32,500

COLOMBIA-7200, DEVELOPMENT OF PHYSICAL RESOURCES FOR THE HEALTH SYSTEM

The objectives of this project are to create nationwide standards for feasibility studies and architectural plans consistent with the levels of complexity involved and building specifications; to improve technical and investment control procedures for construction projects; to standardize the equipping of installations according to the various levels of care in order to achieve coordination between equipment availability and progress of construction; to continue to strengthen the national engineering and hospital maintenance subsystem for the training of human resources; and to create regional engineering and maintenance centers, emphasizing the importance of regular preventive maintenance.

TOTAL		12	3	3	TOTAL	PR	10,240	3,655	4,060
FELLOWSHIP MONTHS	PR	12	3	3	FELLOWSHIPS		9,240	2,655	3,060
					COURSE COSTS		1,000	1,000	1,000

COLOMBIA-7400, MAINTENANCE AND INSTALLATION OF HOSPITAL EQUIPMENT

Under this project attention continues to be given to the maintenance and installation of equipment for hospitals in the country, based on the training of the pertinent technical personnel; the design and organization of teaching programs in teaching laboratories and the provision of teaching material for them; the training abroad of instructors; and the conduct of special short courses and seminars.

TOTAL		5	-	-	TOTAL	UNDP	10,068	-	-
FELLOWSHIP MONTHS	UNDP	5	-	-	SUPPLIES AND EQUIPMENT		6,000	-	-
					FELLOWSHIPS		4,068	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COLOMBIA-8900, HEALTH RESEARCH

The aim of this project is to develop the necessary infrastructure for compliance with health research policies by means of the coordinated action of the different levels and the implementation of effective communication and information procedures.

TOTAL		1	1	-	TOTAL	PR	10,010	10,655	7,060
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CONSULTANT MONTHS	PR	1	1	-	PERSONNEL-CONSULTANTS		2,700	3,000	-
					SUPPLIES AND EQUIPMENT		2,000	2,000	1,000
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
		-----	-----	-----	GRANTS		2,000	2,000	2,000
FELLOWSHIP MONTHS	PR	3	3	3	COURSE COSTS		1,000	1,000	1,000

COSTA RICA

In the social area of the National Development Plan, in force for the period 1974-1980, a philosophical concept called "closing the social gap" is stressed. The general strategy of the Plan recognizes that the expansion of the productive sectors should be accompanied by an increase in public spending to provide the necessary infrastructure and services through the developing of basic and social services oriented towards the population of the country as a whole.

The policy is explicit with respect to those social sectors and, in part, states that "in the health field efforts directed towards the prevention of diseases will continue, in particular those with the highest endemic or epidemic incidence, keeping up the programs of vaccination and providing drinking water, sewerage, and latrine services, especially in the rural areas, as well as improving the general levels of nutrition." A reference to social security is added, to the effect that "the challenge to extend it to the entire population of the country will be faced."

Such views are reiterated in the Plan when the role of the State in development is analyzed, with comments regarding the elements to be considered in order to make the closing of the social gap possible. "It will be a special concern of the State" to provide such services as education, health, housing, and social security to all of the social strata which need them.

The total population of Costa Rica, calculated to be 2,016,450 inhabitants in mid-1976, is characterized by its relatively youthful structure, with 43.3% of the population under 15 years of age; by the predominance of rural residence, with 60% of the inhabitants living in localities of fewer than 2,000 inhabitants (35% in scattered communities with fewer than 500 residents); and by an accelerated process of demographic transition, with a rapid decrease in the birth and overall death rates, which in 1975 were at levels of 30.0 and 5.0 per 1,000 inhabitants, respectively. The annual rate of population growth fell from 3.0% in 1968 to 2.5% in 1975. The population is concentrated in the mountainous region known as the Central Valley, which represents only 6% of the national territory, but has 50% of the inhabitants of the country. Thirty-seven per cent of the population lives in the province of San José, and the remaining 63% is distributed among the other six provinces.

In 1974 the economically active population made up 32% of the total, and the GDP per capita was US\$697. It is expected that 1976 will show an increase of 5-6% in real terms in the production of goods and services. The contribution of the various sectors of the economy to the GDP breaks down as follows: agriculture, forestry, and fisheries, 20.4%; manufacturing industries and mining, 18.0%; electricity, gas, and water, 1.8%; construction, 5.7%; trade, 17.6%; transportation and communications, 5.1%; financial establishments, insurance, and other services to business, 5.5%; real estate, 6.6%; Government, 13.9%; and other general services, 5.4%. Over recent years, there has been a progressive increase in the proportional contributions of industry, trade, and the Government, with a decrease in the percentages for agriculture and construction.

Ten per cent of the population 10 years of age and over is illiterate, with a rate of 15% in the rural areas. It has been estimated that one-third of the total housing is barely adequate, while almost 14% is in bad condition. The urban crowding factor is 2.4 persons per bedroom.

Overall mortality data for 1975 shows the main causes of death to be diseases of the circulatory system (16.8%), tumors (14.2%), accidents (8.6%), diseases of the nervous system (7.5%), gastroenteritis and colitis (6.0%), prematurity and certain diseases of early infancy (5.7%), pneumonia and broncho-pneumonia (5.0%), diabetes mellitus (2.8%), bronchitis (1.7%), and tetanus (1.0%). These 10 groups encompass 69.3% of the causes of death.

Maternal mortality has been reduced from 1.5 deaths per 1,000 live births in 1959 to 0.65 in 1975. Despite the notable increase achieved in hospital care for childbirth (82% in 1975), many of the factors associated with deaths for causes related to pregnancy, labor, and delivery are considered as being susceptible of reduction; these would include, among others, induced abortion, multiple births, infections, and hemorrhages. Infant mortality, which was 67.1 per 1,000 live births in 1969, fell to a rate of 37.1 in 1975.

Available information shows that communicable diseases continue to be an important cause of morbidity, although most of these show a tendency to decrease, especially diarrhea and diseases preventable by vaccination. On the other hand, there is an upward trend in the incidence of venereal diseases. In 1975 malaria had a very low incidence, with transmission interrupted except in a small geographic area. In 1975, enteric diseases, which in 1969 had been the leading cause of death in children under five years of age, ranked second. The tuberculosis mortality rate was reduced to 4.4 per 100,000 in 1975, in which year 74.5% of the population under 15 years of age was given coverage with BCG.

Investigations indicate that in 1975, 58.6% of the children living in rural areas and 43.6% of the children living in urban areas showed some degree of malnutrition. Nevertheless, between 1969 and 1972 the rates of infant mortality from malnutrition among those under five years of age were reduced by 34.8%. Salt iodization has been obligatory since 1972, and sugar for human consumption has been enriched with vitamin A since 1975.

The problems of mental health and alcoholism call for more and more attention, as understanding of their characteristics improves. Suicide, cirrhosis of the liver, and accidents are important causes of death in specific age groups. The low level of dental health is a serious public health problem, especially in the rural areas.

In the field of environmental sanitation, 100% of the urban and 56% of the rural population are served by drinking water systems, although not always in adequate quantity or quality. Some 94% of the urban population (59% served by sanitary sewerage systems) and 86% of the rural population have sewage disposal systems. For the country as a whole, the collection, transport, disposal, and treatment of solid wastes is inadequate, to the point that only in the metropolitan area of the Capital and in the city of Heredia are sanitary methods employed for this purpose. There is a high contamination of surface waters by sewage and industrial wastes. Further, there is a considerable problem of soil and water contamination by pesticides and fertilizers which are applied without effective controls. Air pollution is not critical. The means for controlling drugs and medication are deficient. There is insufficient information regarding occupational health conditions and inadequate hygiene control of food.

There are problems in gauging the animal health and veterinary public health situation because of the lack of controls which would make it possible to evaluate the potential hazard for human health posed by the zoonoses. However, from a survey carried out during the first months of 1976, it is known that almost 10% of the bovine population is affected by brucellosis (this represents approximately 250,000 animals). In 1975 there were seven cases of human brucellosis and in 1976 eight cases.

That same survey showed a low incidence of tuberculosis, which affects 0.2% of cattle. However, the incidence of human tuberculosis in which there has been some animal involvement as a channel of contagion is unknown, as analyses which would make it possible to identify the origins of the cases treated are not being carried out. These animal health problems also have an indirect repercussion on the levels of human health, in terms of the decrease in protein availability because of the premature death of litters and problems in milk production. The country is not affected by foot-and-mouth disease, and canine rabies does not represent a problem.

Medical care is provided by various institutions, the most important of which are those under the authority of the Ministry of Health and the Caja Costarricense del Seguro Social (CCSS). In 1974, there were 604 health establishments of all types. Until 1972 all of the installed capacity of the sector was located in communities with over 2,000 inhabitants, and the coverage of health services for rural and scattered rural population was practically nonexistent until that year. That situation has been changed through the strategies of the Rural Health Program, which in its future projection will become the program of basic medical care.

As of July 1976, the Rural Health Program served 486,000 persons (70% of the population in its area of responsibility); it had 193 health posts, served 2,580 communities and 97,500 dwellings, and covered an area of 21,100 km² (41% of the national territory). Four to six annual visits were made to all of the family groups registered in the program, and the active participation of the community in integrated rural development was encouraged.

In 1974 the following human resources were available, with a ratio per 10,000 inhabitants: 1,256 doctors (6.5); 28 public health doctors (0.1); 353 dentists (1.8); 1,374 nurses (7.1); 3,736 nurses aides (19.2); 19 sanitary engineers (0.1); 34 veterinarians (0.2); 119 health inspectors (0.6); and 7 health educators (0.04). In 1976 there were 165 rural health assistants.

Laboratory service activities are limited to satisfying the demand, with no coordination between the various institutions which provide such services.

Epidemiological surveillance suffers from underreporting, and cases are not always investigated.

The health sector is basically made up of three institutions: the Ministry of Health, the CCSS, and the Instituto Costarricense de Acueductos y Alcantarillados (A y A). It is the responsibility of the Ministry of Health to define the national health policy; to organize and provide top management for the health services of the country, to effect sectoral coordination; to formulate technical standards; and to plan the activities within the sector. In addition to its responsibilities in coordinating and setting standards and to the political function which is characteristic of a ministry in the Executive Branch of Government, the Ministry of Health is the direct executor of preventive and curative health activities, although in the future it will give preferential or exclusive attention to preventive and promotional action, once the process of transferring hospital establishments to the CCSS is completed.

The CCSS is responsible for implementing the social security services, obligatory and voluntary, which cover illness, maternity, incapacitation, old age, and involuntary unemployment. The system is obligatory for all workers, whether blue or white collar, who receive a salary or wages. Since its establishment in 1943, the system has made definite progress in carrying out its legal mandate. The recent governmental decision on universalizing the system, which calls for every citizen to sign up, with the State covering the enrollment fees of the non-wage-earning population who would be covered by social security services for illness and maternity, has required a reformulation of the system of operation in various regions; and at present the way in which the system will operate at the national level is being studied. In the structural pattern of CCSS there are two major branches: the Office of Medical Services and the Office of Administrative Services.

The A y A has national responsibility for the construction and management of systems to provide drinking water and to dispose of sewage. As with CCSS, its nature is that of an independent agency of the Government, which presupposes administrative and financial autonomy. In both cases (CCSS and A y A), the Ministry of Health is not represented on the Governing Board, a fact which weakens the concept of sector leadership that the law invests to the Ministry of Health. However, the text of the law states that the authority of the Ministry in the process of planning, in the taking of political decisions, and in the formulating of technical standards is the pillar which supports this concept of leadership. Nevertheless, the Executive Power names the Executive Chairmen of the independent agencies, thereby exercising its leadership role for the policy of institutional development.

Establishments providing medical care and other health services in 1976 were: health posts and dispensaries, 238; health centers, 70; education and nutrition centers, 259; rural assistance centers, 7; specialized hospitals, 8; peripheral hospitals, 8; regional hospitals, 8; central general hospitals, 3; peripheral clinics, 7; private clinics or hospitals, 6; child care centers, 10; mobile units, 10; and campaigns (Ministry of Health), 4.

As a result of the law for the transfer of hospitals, an important portion of the installed capacity has shifted to the CCSS; in addition, as a result of the law for social development and family allocations, this operation in the Ministry has also increased very importantly, a fact which will eventually mean a great increase in institutional and sectoral capabilities. In other words, the CCSS received 25 hospitals which have approximately 5,800 beds, and the Ministry faced the challenge of resources in an amount of \$140 million for 1976, a total which will increase gradually over the next three years.

In the budget for 1976, the Ministry of Health has been allocated \$163 million; of this, \$93 million represents transfers in the form of subsidies to medical and health care establishments, programs for water supply and sewerage systems, amortization of debt, and others. This leaves \$70 million for the regular programs of the Ministry. Thus, the \$140 million coming from the Fund for Social Development and Family Allocations presupposes an increase of 200%, i.e., a tripling of the resources destined for programs of the Ministry.

The Social Development and Family Allocations Program was designed to take care of four large subprograms, identified as health, feeding and nutrition; rural worker settlement and improvement of rural housing; training and extension work; and the non-contributory pension system, and the providing of illness and maternity benefits to independent workers. For the coordinated execution of the various subprograms and the activities which make them up, there are formal mechanisms at the inter- and intrainstitutional levels. The allocated increase in health, feeding and nutrition programs is devoted to provision of services such as the establishing and operation of education and nutrition centers, child care centers, rural health programs, latrine construction, health education, and rural dentistry.

The National Health Plan 1974-1980 gathers together, in a consistent fashion, a series of specific premises, policies, and objectives; these have been defined within the terms of the goals of Santiago (the Ten-Year Health Plan for the Americas). In summary, the following concepts have been assembled as premises: the right of the population to health care and the obligation of the State to organize such care and to provide it; the integrated nature of the action, in terms of prevention, cure, and rehabilitation; the regionalization of services in order to broaden coverage; the provision of services to all of the people; the priority for outpatient care; the promotion of education, training and use of human resources in the field of health; and the compatibility between the cost of services and the economic capabilities of the country.

In developing these premises, policies are established for increasing life expectancy at birth by decreasing infant mortality; expanding the coverage of services by providing integrated primary care in the rural environment; improving services to individuals in the areas of vaccination, epidemiological surveillance and control, maternal and infant care, feeding and nutrition, population dynamics, dental health, chronic and neoplastic diseases, and mental health; developing environmental sanitation with actions in the fields of drinking water supply and sewage disposal, soil contamination, occupational health, food and drug control, and traffic accidents; improving supplementary services; and developing the infrastructure.

The Health Plan as enunciated has its legal basis in the General Health Law, promulgated in October 1973, which corrected the constitutional lacuna and established the precept that health is a matter of public interest for which the State has leadership responsibility; in the Organic Law of the Ministry of Health of November 1973, which gave the Ministry authority over the defining of health policies and planning and established its internal structure and the functions of the Sectoral Planning Unit; in the National Planning Law, of April 1974, which defined the aspects of intersectoral coordination; in the Law for the Transfer of Hospitals, of September 1973, which decreed that the medical and health care institutions of the Ministry of Health, of the Social Welfare Boards, and of the Patronatos are to be transferred to the CCSS; in the Social Security Law, of October 1943, which institutionalized the system to cover all blue and white collar workers who are paid wages or salaries, and which also provided for the inclusion of independent workers; and, finally, in the Law for Social Development and Family Allocations, of December 1974, which created the Fund for Social Development and Family Allocations and established a General Directorate to administer it.

The initial program effort to implement the health strategies and policy of the country identifies seven service programs (medical care, maternal and child health, family planning and sex education, dental health, nutrition, epidemiology, and environmental sanitation), and four programs directed towards development of the infrastructure (health administration, development of physical resources, development of human resources, and research).

As regards the service programs, the following objectives are stated: to control communicable diseases preventable by vaccination; to avoid the reintroduction of smallpox and yellow fever; to complete the eradication of malaria by 1978; to accelerate the decrease in the rates of morbidity from tuberculosis and to restrain the increase in the incidence of venereal diseases; to reduce the mortality rates from intestinal diseases by 50%, reduce infant mortality by 30 to 40% and to reduce the morbidity in children from one to four years of age by 50 to 55%; to decrease grade III malnutrition by 85% and grade II by 30% in children under one year of age, as well as to reduce the prevalence of nutritional anemias by 30%; to formulate and implement a national policy for feeding and nutrition; to define a population policy; to favorably modify the indices of dental pathology, including the fluoridation of potable water supplies for at least 40% of the population; to stimulate the detection, early diagnosis, and timely treatment of chronic illnesses; to improve the knowledge of neoplastic diseases and to decrease their lethal effects; to achieve a 60% coverage in 1977 and 80% in 1980 of care for psychiatric ailments, and to slow the upward trend in alcoholism and drug dependency; to maintain 95% of the urban population supplied with drinking water services with house connections and to increase the coverage in the rural areas to 71% to provide sewerage services to 70% of the urban population, and to increase the coverage by individual sewage disposal systems in the rural areas; to implement systems for sewage treatment in the metropolitan area of San José; to formulate policies and programs to achieve control of water and soil contamination by sewage, industrial wastes, and pesticides; to carry out programs for the control of drugs and medications; to reduce the occurrence of traffic accidents and to establish programs of occupational health and industrial hygiene; and to strengthen supplementary services, with special attention to nursing, laboratory, epidemiological surveillance, rehabilitation, and radiological services.

It is proposed to make structural changes which will make it possible to transform the sector into a system appropriate to the political, cultural, economic, social and technological conditions of the country; to obtain the maximum efficiency in the level and structure of health care with the maximum increase in productivity of the services; to improve the timely and rational revision of decisions by establishing an information-decision-evaluation-control system; to define the process of planning and management of human resources; to improve the training of administrative personnel in the health services; to broaden installed capacity through a better utilization of resources in order to guarantee between 100 and 115 hospital discharges per 1,000 inhabitants/year and 2.5 consultations per inhabitant/year; to develop the sector's financing systems, including the active participation of the community; to make investments and expenditures more rational; to improve the infrastructure of health research; and to analyze the legislation in force from a sectoral viewpoint with the aim of making the necessary adjustments to achieve an effective interinstitutional coordination which would make it possible to fulfill the ambitious governmental policies in the health field.

The program of cooperation between the country and PAHO/WHO in the field of epidemiology is oriented towards the maintaining of epidemiological surveillance of the foci of malaria; the study of the local characteristics of certain parasitoses such as Chagas' disease, leishmaniasis, and filariasis; the control of tuberculosis, leprosy, sexually transmitted diseases, and diseases preventable by vaccination; and the training of health personnel in the general area of epidemiological surveillance.

Support is given in the area of environmental sanitation to the carrying out of a plan which would include the different parameters for environmental control and the implementing of programs of latrine construction and rural water supply, hygienic food control, control of atmospheric pollution, occupational hygiene, control of the pollution of bodies of water, and the disposal of solid wastes.

In the field of water supply, the overall administrative development of the A y A is supported through the Program of Administrative Rationalization, which basically covers the areas of organic structural development, automatic data processing, supply and transportation, maintenance, and management information systems.

As regards the development of health services, the program contributes towards the objective of establishing the process of regionalization at the national level, and is concerned with improving the joint programming between the Ministry of Health and the CCSS, the establishing of information systems, and the consolidating of coverage in the rural and peri-urban areas.

Through the Government-IDB-PAHO/WHO Agreement, the program cooperates in the organizing of the network of medical care services, specifically, in the design and implementing of structural and organizational models and the defining of formulas and procedures for the training of personnel in their management. In addition, the program is concerned with the administrative development of health services, with emphasis on the aspects of organic structure, planning, informational system, financial management, supplies, and personnel administration. Finally, the program supports the development of human resources for health, in the fields of the teaching of medicine, advanced nurses training, and education in sanitary engineering.

COSTA RICA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	254,697	36.7	182,790	32.0	189,430	31.1
SERVICES TO INDIVIDUALS	53,970	7.8	58,435	10.2	56,300	9.2
0200 COMMUNICABLE DISEASES	53,970	7.8	58,435	10.2	56,300	9.2
MALARIA						
ENVIRONMENTAL HEALTH SERVICES	146,472	21.1	64,020	11.2	69,445	11.4
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	45,685	6.6	64,020	11.2	69,445	11.4
2100 WATER SUPPLY AND EXCRETA DISPOSAL	100,787	14.5	-	-	-	-
COMPLEMENTARY SERVICES	54,255	7.8	60,335	10.6	63,685	10.5
4300 EPIDEMIOLOGICAL SURVEILLANCE	54,255	7.8	60,335	10.6	63,685	10.5
II. DEVELOPMENT OF THE INFRASTRUCTURE	440,336	63.3	388,680	68.0	419,280	68.9
HEALTH SYSTEMS	401,156	57.7	344,190	60.2	368,400	60.6
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	69,455	10.0	78,020	13.7	82,175	13.5
5100 GENERAL PUBLIC HEALTH SYSTEMS	118,730	17.1	118,495	20.7	136,320	22.4
5200 MEDICAL CARE SYSTEMS	73,617	10.6	-	-	-	-
5300 PLANNING	-	-	-	-	-	-
5400 STATISTICS AND INFORMATION SYSTEMS	3,000	.4	3,000	.5	3,000	.5
5500 MANAGEMENT SYSTEMS	136,354	19.6	144,675	25.3	146,905	24.2
DEVELOPMENT OF HUMAN RESOURCES	39,180	5.6	44,490	7.8	50,880	8.3
6200 MEDICINE	13,480	1.9	15,390	2.7	17,680	2.9
6300 NURSING	15,790	2.3	18,045	3.2	20,740	3.4
6400 ENVIRONMENTAL SCIENCES	9,910	1.4	11,055	1.9	12,460	2.0
GRAND TOTAL	695,033	100.0	571,470	100.0	608,710	100.0

*LESS THAN .05 PERCENT

COSTA RICA
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
1977	\$				\$	\$	\$	\$	\$	\$	\$	\$
PAHO---PR	241,995	48	-	5	179,200	9,200	51	39,270	4,200	-	-	10,125
PW	87,307	12	12	11	73,855	1,000	-	-	4,750	7,702	-	-
PG	167,496	18	-	11	95,899	2,577	88	61,540	-	6,380	-	1,100
WHO---WR	198,235	36	12	4	138,855	4,230	51	39,270	3,000	6,880	6,000	-
TOTAL	695,033	114	24	31	487,809	17,007	190	140,080	11,950	20,962	6,000	11,225
PCT. OF TOTAL	100.0				70.2	2.4		20.2	1.7	3.0	.9	1.6
1978												
PAHO---PR	261,615	48	-	5	189,880	10,300	51	45,135	4,900	770	-	10,630
PG	100,000	12	-	7	68,935	2,000	36	29,065	-	-	-	-
WHO---WR	209,855	36	12	4	154,035	4,500	54	47,790	3,000	530	-	-
TOTAL	571,470	96	12	16	412,850	16,800	141	121,990	7,900	1,300	-	10,630
PCT. OF TOTAL	100.0				72.3	2.9		21.3	1.4	.2	-	1.9
1979												
PAHO---PR	282,855	48	-	5	201,175	10,400	51	52,020	8,100	-	-	11,160
PG	100,000	6	-	2	52,230	2,500	42	38,270	7,000	-	-	-
WHO---WR	225,855	36	12	4	165,955	4,800	50	51,000	-	4,100	-	-
TOTAL	608,710	90	12	11	419,360	17,700	143	141,290	15,100	4,100	-	11,160
PCT. OF TOTAL	100.0				68.9	2.9		23.2	2.5	.7	-	1.8

PAHO-PR-REGULAR BUDGET
 PW-COMMUNITY WATER SUPPLY
 PA-INCAP - REGULAR BUDGET
 PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
 PG-GRANTS AND OTHER CONTRIBUTIONS
 PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
 PJ-GRANTS RELATED TO CAREC
 WHO---NR-REGULAR BUDGET
 UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
 UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
 NO-GRANTS AND OTHER FUNDS

COSTA RICA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III	<u>Program Planning and General Activities</u>			50	27,935	50	29,490	50	31,450
AMRO-5030(PR/WR)	Area Representative Seminar Costs	0.0283	D-1						
AMRO-1330	<u>Maternal and Child Health and Family Welfare</u>			36	10,343	36	9,310	36	7,590
AMRO-1331 (PR/PG)	Medical Officer Consultants and Seminars	0.3365	P-5						
AMRO-2030(PR/WR)	<u>Environmental Health Services</u>			110	16,455	110	15,995	100	16,005
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130	<u>Animal Health and Veterinary Public Health</u>			220	56,990	225	47,585	160	37,680
AMRO-3131 (PR/WR/PG/WT)	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687	P-3						
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			260	30,125	255	32,133	270	35,888
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330	<u>Epidemiological Surveillance</u>			60	12,470	50	11,605	40	13,045
AMRO-4331 (PR/WR)	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			36	4,685	36	4,905	36	5,125
	Health Planner	0.2031	P-4						
AMRO-5430(PR/WR)	<u>Statistics and Information Systems</u>			36	6,155	36	6,570	36	7,060
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			50	5,435	50	5,705	50	5,975
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			36	2,885	36	4,540	36	4,885
	Health Manpower Officer	0.3627	P-4						
	Total All Programs			894	173,478	884	167,838	814	164,703

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

COSTA RICA - DETAIL

COSTA RICA-0200, MALARIA ERADICATION

According to the National Health Plan, malaria can be eradicated by 1978 provided the country has the necessary resources available. With this in view, the project calls for continued efforts to eradicate *Aedes aegypti*; continued epidemiologic surveillance in border areas and, with the cooperation of the municipal authorities in the major ports, programs to clean up lots and yards and maintain surveillance of vessels; conduct of epidemiologic surveys of filariasis foci; and further studies to gain a better knowledge of the prevalence and distribution of trypanosomiasis and encourage programs for its control.

TOTAL		12	12	12	TOTAL	WR	53,970	58,435	56,300
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		44,000	47,200	50,700
4.0411					DUTY TRAVEL		1,500	1,500	1,500
TOTAL		11	11	-	SUPPLIES AND EQUIPMENT		-	-	4,100
					FELLOWSHIPS		8,470	9,735	-
FELLOWSHIP MONTHS	WR	11	11	-					

COSTA RICA-2000, ENVIRONMENTAL SANITATION

In the population as a whole, 6% of deaths are the result of diseases caused by environmental deficiencies. Sewerage systems are lacking in rural areas, where there is still a shortage of 25,000 latrines, in addition to some 40,000 in poor condition that need to be replaced.

The purposes of this project are to promote and further the adjustment of the structure, organization and operation of the environmental sanitation services in order to achieve higher standards of coordination and efficiency; construct and install 35,000 latrines; prepare public refuse collection programs for nine towns; initiate a program for control of pollution in coastal waters; complete the second stage of the San José water supply system; continue construction projects in 14 towns; build 75 rural water supply systems; install 2,000 hand-operated pumps; and initiate the second stage of the metropolitan sanitary sewerage system.

TOTAL		12	12	12	TOTAL	PR	45,685	64,020	65,445
P-4 SANITARY ENGINEER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.2029					PERSONNEL-CONSULTANTS		2,700	6,000	6,800
TOTAL		1	2	2	DUTY TRAVEL		1,200	1,300	1,400
					FELLOWSHIPS		2,310	15,045	17,340
CONSULTANT MONTHS	PR	1	2	2					
TOTAL		3	17	17					
FELLOWSHIP MONTHS	PR	3	17	17					

COSTA RICA-2100, WATER SUPPLY

At the end of 1975 Costa Rica had a total of 2,020,000 inhabitants, 740,000 of whom were living in towns with more than 5,000 inhabitants and the rest in rural areas. It is estimated that 95% of the urban and 49% of the rural population receive water through individual house connections and that, overall, more than 88% of the country's total population has water service of one kind or another.

The Costa Rican Water Supply and Sewerage Institute is carrying out an ambitious plan aimed at extending the coverage of water supply and sewerage services, both in urban and rural areas, during 1974-1980. The size of this plan makes it necessary to carry out institutional development programs within the context of this process called Administrative Rationalization Program.

The specific purpose of this program is to upgrade the Institute's administrative activities, particularly through an internal reorganization, the development of a general plan, and the introduction of reforms in specific areas including automatic data processing, supplies, maintenance, commercial accounts and information systems.

TOTAL		24	-	-	TOTAL		100,787	-	-
P-4 PROJECT MANAGER	PW	12	-	-	SUBTOTAL	PR	13,480	-	-
.4584									
G-4 SECRETARY	PW	12	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
.4671					FELLOWSHIPS		10,780	-	-
TOTAL		12	-	-	SUBTOTAL	PW	87,307	-	-
CONSULTANT MONTHS	PR	1	-	-	PERSONNEL-POSTS		44,965	-	-
CONSULTANT MONTHS	PW	11	-	-	PERSONNEL-CONSULTANTS		28,890	-	-
TOTAL		14	-	-	DUTY TRAVEL		1,000	-	-
					SUPPLIES AND EQUIPMENT		7,702	-	-
FELLOWSHIP MONTHS	PR	14	-	-	COURSE COSTS		4,750	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

COSTA RICA-4300, EPIDEMIOLOGY

The tuberculosis control program is being extended gradually to more and more health centers, and is expected to cover all 79 centers by the end of 1976. BCG vaccination, performed in hospitals, health centers and health stations, reached a coverage of 58% of the 48,183 infants born in institutions in 1975. The incidence of diseases preventable by vaccination has shown a downward trend, evidenced specifically by the fact that no cases of poliomyelitis have been reported since 1974. Venereal diseases, especially gonorrhea, showed a rise in 1974, and a national control program is under way with the aim of reducing the number of cases through extension of venereal disease control activities to the general health services. A nationwide leprosy control program, with emphasis on early diagnosis, immediate treatment and prevention of disabilities, is in progress as a joint activity of the Ministry of Health and the Costa Rican Social Security Agency.

TOTAL		12	12	12	TOTAL	PR	54,255	60,335	63,685
P-4 EPIDEMIOLOGIST	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.4210					DUTY TRAVEL		2,000	3,000	3,000
TOTAL		14	14	14	SEMINAR COSTS		2,000	2,500	2,500
					SUPPLIES AND EQUIPMENT		-	770	-
FELLOWSHIP MONTHS	PR	14	14	14	FELLOWSHIPS		10,780	12,390	14,280

COSTA RICA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The Government proposes to raise life expectancy to between 71.02 and 71.07 years for children born in 1980. This will require reducing infant mortality in children under one year of age by 30% in children from 1-4 years of age by 50%, and in those over five years according to the levels established in the standard tables of the UN.

PAHO/WHO is providing assistance under this project through its Country Representative, who coordinates and guides the technical advisory services furnished by the Organization to Costa Rica in connection with its programs.

TOTAL		24	24	24	TOTAL		69,455	78,020	82,175
P-5 PAHC/WHO REPRESENTATIVE	PR	12	12	12	SUBTOTAL	PR	60,400	63,485	66,620
.0415					PERSONNEL-POSTS		47,275	49,855	52,460
G-7 ADMINISTRATIVE ASSISTANT	WR	12	12	12	DUTY TRAVEL		3,000	3,000	3,000
4.4714					COMMON SERVICES		10,125	10,630	11,160
					SUBTOTAL	WR	9,055	14,535	15,555
					PERSONNEL-POSTS		9,055	14,535	15,555

COSTA RICA-5100, DEVELOPMENT OF HEALTH SERVICES

The objectives of the 1974-1980 National Health Plan are to achieve a 100% coverage of the population by 1980 and a life expectancy of 71 years for those born in that year. The Government has established policies and defined strategies for attaining these objectives through seven service programs and four infrastructure development programs. The service programs include medical care, dental health, maternal and child health, nutrition, epidemiology, family planning and sex education, and environmental sanitation. The four infrastructure development programs include development of physical resources, development of human resources, administrative development, and research.

PAHO/WHO is cooperating with the Government in the medical care program, which calls for regionalization of services, local programming in conjunction with the Ministry of Health and the Costa Rican Social Security Agency, information systems, consolidation of the extension program, and health services to rural and periurban areas. Efforts will also be made to provide general support to the other service and infrastructure development programs in the areas of programming and administrative development.

TOTAL		36	36	36	TOTAL		161,205	163,170	183,225
P-4 ADMIN. METHODS OFFICER	PR	12	12	12	SUBTOTAL	PR	42,475	44,675	46,905
.0874					PERSONNEL-POSTS		39,475	41,675	43,905
P-4 MEDICAL OFFICER	WR	12	12	12	DUTY TRAVEL		3,000	3,000	3,000
4.3974					SUBTOTAL	WR	118,730	118,495	136,320
P-3 SANITARIAN	WR	12	12	12	PERSONNEL-POSTS		75,000	80,300	86,100
4.0412					PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		3	3	3	DUTY TRAVEL		2,730	3,000	3,300
CONSULTANT MONTHS	WR	3	3	3	SUPPLIES AND EQUIPMENT		6,880	530	-
TOTAL		26	29	36	FELLOWSHIPS		20,020	25,665	36,720
FELLOWSHIP MONTHS	WR	26	29	36	GRANTS		6,000	-	-

COSTA RICA-5202, HOSPITAL ADMINISTRATION

Costa Rica's Constitution calls for universal social security coverage and integration of all hospitals into the social security system.

The purpose of this project is to assist the Costa Rican Social Security Agency in establishing a regionalized system of services with adequate administrative and technical capacity to offer full coverage to the entire population.

	FUND	1977	1978	1979		FUND	1977	1978	1979
							\$	\$	\$
TOTAL		5	-	-	TOTAL	PG	73,817	-	-
CONSULTANT MONTHS	PG	5	-	-	PERSONNEL-CONSULTANTS		16,080	-	-
TOTAL		79	-	-	DUTY TRAVEL		1,077	-	-
FELLOWSHIP MONTHS	PG	79	-	-	FELLOWSHIPS		55,360	-	-
					PROGRAM SUPPORT COSTS		1,100	-	-

COSTA RICA-5401, MEDICAL RECORDS

An international five-month course on clinical records and medical documents has been offered each year since 1966 for health sector officials from Costa Rica and other Central American countries. A total of 175 officials have completed the training in medical records thus far. The course will continue to be offered during the next four years.

TOTAL		3,000	3,000	3,000
SUBTOTAL	PR	-	-	3,000
COURSE COSTS		-	-	3,000
SUBTOTAL	WR	3,000	3,000	-
COURSE COSTS		3,000	3,000	-

COSTA RICA-5500, MANAGEMENT OF HEALTH SERVICES

National health policy on extension of coverage, social development in the areas of nutrition and sanitation, and structural changes in the health sector necessitates far-reaching modifications of the Ministry of Health management systems, particularly in regard to planning, information, finance, supplies, personnel and organizational structure.

The purpose of this project is to strengthen other areas which are components of the general management process in order to place at the Ministry's disposal the necessary tools for exercising suitable supervision over the health sector. This will be done by providing specialized technical advisory services and by training staff in the skills required for instituting the necessary changes.

TOTAL		18	12	6	TOTAL	PG	93,879	100,000	100,000
P-4 MEDICAL OFFICER .3973	PG	12	-	-	PERSONNEL-POSTS		58,613	40,935	43,230
P-4 PROJECT MANAGER .4923	PG	6	12	6	PERSONNEL-CONSULTANTS		21,206	28,000	9,000
TOTAL		6	7	2	DUTY TRAVEL		1,500	2,000	2,500
CONSULTANT MONTHS	PG	6	7	2	SEMINAR COSTS		-	-	7,000
TOTAL		9	36	42	SUPPLIES AND EQUIPMENT		6,380	-	-
FELLOWSHIP MONTHS	PG	9	36	42	FELLOWSHIPS		6,180	29,065	38,270

COSTA RICA-6200, MEDICAL EDUCATION

The training of health professionals and technicians is carried on in the different schools of the University of Costa Rica. In general, there are not enough personnel trained in the health sciences to meet the country's needs. In 1974, there were 6.5 physicians, 1.8 dentists, 7.1 nurses, 1.2 microbiologists and 2.3 pharmacists per 10,000 inhabitants. As for public health specialists, there were 0.1 physicians and 0.04 health educators per 10,000 inhabitants, and the rates were similar for other professionals. There are no training facilities for public health specialists in the country.

The purpose of this project is to provide scientific, ethical and cultural training for the human resources needed by the health sector, through undergraduate and postgraduate programs in line with the country's health plans and stage of economic and social development. Work will continue on the reform of the curriculum of the School of Medicine, and programs for the training of intermediate-level personnel will be revised and prepared.

TOTAL		1	1	1	TOTAL	WR	13,480	15,390	17,680
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		14	14	14	FELLOWSHIPS		10,780	12,390	14,280
FELLOWSHIP MONTHS	WR	14	14	14					

COSTA RICA-6300, ADVANCED NURSING EDUCATION

This project is designed to strengthen teaching programs in nursing by adapting them to the needs of the country's health services and incorporating advances in new educational technology, so that the schools of nursing may provide a larger number of students with a high-quality education without increasing its costs.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

It is proposed to initiate a two-year course for general nursing education; to modify the present plan of studies to prepare nurses in specialized areas; to continue postgraduate courses in obstetrics and psychiatry; and to initiate courses in pediatrics and community nursing. A program of faculty training in educational technology will be initiated.

TOTAL		1	1	1	TOTAL	PR	15,790	18,045	20,740
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		13,090	15,045	17,340
TOTAL		17	17	17					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	17	17	17					

COSTA RICA-6400, SANITARY ENGINEERING EDUCATION

The School of Engineering has no specialized courses in sanitary engineering. This fact, combined with the low remuneration offered by national institutions to sanitary engineers, makes it difficult to obtain candidates wishing to specialize abroad in this field, which, in turn, contributes to the shortage of professionals in this branch of engineering.

The objectives of this project are to improve coordination between the School of Engineering and the State agencies responsible for environmental sanitation programs, to relate the programs for teaching of engineering to the country's needs, and to increase the technical capability of professionals who are working in sanitary engineering projects through short-term courses on specific topics.

TOTAL		2	2	2	TOTAL	PR	9,910	11,055	12,460
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CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3	COURSE COSTS		2,200	2,400	2,600
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FELLOWSHIP MONTHS	PR	3	3	3					

CUBA

The Republic of Cuba is a socialist state of workers and peasants and other manual and intellectual workers in which all the power is exercised by the working population through the Assemblies of People's Power. This power is based on the firm alliance of the working class with the peasants and other working strata of the urban and rural areas, under the leadership of the working class (Articles 1 and 4 of the Constitution of the Republic). The estimated population in 1975 was just over 9,270,000 inhabitants, of which 51.1% were males; 37.2% under 15 years of age, 6.3% over 65 years of age; and 60.4% were resident in urban centers with more than 2,000 inhabitants.

All workers are entitled to health care and health protection and the State guarantees that right through the provision of free medical care in a vast network of medical care and dental facilities that extends throughout the entire country, and through the execution of preventive programs aimed at individuals and the environment. All the components of the health sector, both for curative and preventive activities, are at present integrated into a single national system whose supreme authority is the Ministry of Public Health.

This central level constitutes the maximum authority for the formulation of health policy and plans, the formulation of standards, and the supervision and evaluation of programs, and direct responsibility for national services such as research institutes and central teaching and production units. Execution and supervision of the activities are decentralized to the provincial and municipal levels.

Administrative and operational regionalization is a fundamental feature of the National Health System and has made it possible to optimize the distribution of services at different levels and categories of complexity according to the geographical and demographic characteristics of each place; the graduated linkage between all services that form part of the system; the continuous and reciprocal exchange between the different levels of information concerning care of individuals and the community; and the cross-participation of professional, middle-level technical, and auxiliary personnel between the services of the different levels and categories.

Health service coverage is extended to the entire population. Access to it is not limited geographically but is fully effective in economic and social as well as legal terms, and covers both old and newly created rural communities. The Constitution of the Republic guarantees the full right of the population to the use of the services of the health system without political, racial or any other type of discrimination. The fact that care (including hospitalization, consultations in polyclinics, laboratory examinations and radiology, rehabilitation and most drugs) is free of charge eliminates any restrictions of an economic nature.

At all levels of the National Health System close relations have been developed with the mass organizations of the population such as the Committees for the Defense of the Revolution (CDR), the National Association of Small Farmers (ANAP), the Trade Unions, and the Federation of Cuban Women (FMC). In this way there is increasingly active participation of the community in the planning, execution and the evaluation of health services, and this participation took on even deeper dimensions with the installation of the Organs of People's Power in 1976. This has made it possible to substantially increase the population's knowledge of health, and has facilitated the expansion of vaccination programs, strengthened physician/patient relations, and increased the confidence of the community in the health services.

Epidemiological surveillance is not limited to early knowledge of epidemic outbreaks but also emphasizes the immediate application of effective measures for reducing them. Since the beginning of the Revolution, this has strengthened and increased the achievements of the program for the control of communicable diseases, foremost among which are the eradication of malaria, diphtheria, poliomyelitis and tetanus of the newborn, and a sharp decline in the rates of morbidity and mortality due to gastroenteritis and tuberculosis.

Outstanding features of the tuberculosis program are the systematic vaccination of the newborn and school-age children with BCG, radiographic examination of persons positive to PPD, bacteriological investigation of persons with cough, complete study of persons in contact with detected cases, hospital and domiciliary treatment of patients until they are rendered negative, and the integration of tuberculosis services with the services of polyclinics that are responsible for the continuing control of patients. As a result of the scope and depth of this program, the incidence of tuberculosis in 1975 fell to 14.2 per 100,000 population.

Persons over 60 years of age and housewives are the only sectors of the population in which cases of tetanus occur, since they are outside the programs for the vaccination of workers and students; consequently, the mass organizations of the community (CDR and FMC) have assigned priority to their participation in the tetanus immunization program. However, it is to be noted that in 1975 tetanus incidence and mortality were only 0.7 and 0.3 per 100,000 population, respectively.

In 1975 totals of 4,442 cases of syphilis and 4,385 of gonorrhea were recorded for the entire country. Control of venereal diseases is assigned priority attention by the Health System and includes the medico-social study of cases and their treatment and laboratory control in accordance with the guidelines recommended by international agencies. In 1976 a new system of statistical information on venereal diseases was introduced, and the polyclinics became responsible for executing the control program.

Leprosy continues to decline as a result of active case detection, ambulatory treatment of cases, and supervision of contacts; in 1975 the incidence was 3.6 per 100,000 population.

The *Aedes aegypti* control program is being carried out in accordance with the strategy and standards recommended by international meetings sponsored by PAHO/WHO, especially the ultralow volume application of insecticides which in 1976 was extended to six of the seven provinces that made up the former politico-administrative structure.

In the area of maternal and child health, very considerable efforts have been made in the identification and care of high-risk pregnant women, perinatal care, care of premature babies, institutional delivery and early treatment of acute diarrheal diseases. These efforts reduced infant mortality to 27.4 per 1,000 live births in 1975, and there is good reason to believe that the goal established for 1980 (25.0 per 1,000 live births) will not only be reached but also exceeded. It is intended to reduce maternal mortality (6.0 per 10,000 live births in 1975) to 2.0 by 1980 as a result of a program that includes the institutional delivery of all children born (98.7% in 1975), legal and socioeconomic protection of motherhood, psychoprophylactic preparation for delivery, health education for pregnant women, extension of the network of maternity homes to the most remote parts of the country in order to provide care for high-risk pregnant women, sex education, supplementary feeding for pregnant women, and the granting of 6-12 weeks paid maternity leave for manual and intellectual workers, respectively, and its possible extension in the case of multipara. In 1975 the birth rate was 20.7 per 1,000 population. The accelerated incorporation of women into social work is leading to changes in the patterns of fertility (fall in the number of first deliveries at the beginning and end of the reproductive age, spacing of births, and decline in the total number of pregnancies per woman of reproductive age), and will thus further help to prevent prematurity and maternal mortality. The program, jointly sponsored by PAHO/WHO and UNFPA is assisting the Government to define methods and practices of fertility regulation for the female population which requests it, all of which is an integral part of the maternal and child health program.

Malnutrition programs are of less importance since the population has an ensured daily intake of 2,700 calories per capita, including 64 grams of protein, and to this must be added the food received by office workers, manual workers, farmers and professionals in their places of work and by children and students in educational institutions. Agricultural and fisheries programs have made it possible to increase the supply of foodstuffs to the population; in the last 12 years the fish catch increased six times and the production of foods for children increased seven times. At present all children under seven years of age, pregnant women, persons over 65 years of age, and needy sick people receive a liter of milk each day. The Ministry of Public Health has made progress in formulating and executing the national nutrition program, the objectives of which are to ascertain the nutritional status of the population and to monitor it; to assign priority nutritional attention to children under one year of age, pregnant women, and the groups that require a high calorie intake because of their work; to cooperate in the formulation of a multisectoral food and nutrition policy and to help execute it; to deal with the malnutrition problems arising from excessive or poorly balanced intakes; and to regulate health education concerning nutrition problems. This national program is being carried out at all levels of the National Health System, primarily at the level of the polyclinics, and it is also planned to establish pediatric, obstetric and adult nutrition clinics in all the provinces. Priority attention continues to be assigned to the training of qualified personnel. By the end of 1976, a total of 20 physicians had completed a two-year residency in public health nutrition; furthermore, the course for dietitians has been extended from one to three curriculum years.

Mental health problems are dealt with in institutions where care is provided for hospitalized chronic patients, special emphasis being placed on the humanization of the treatment and social rehabilitation. Also worthy of mention is the community psychiatry program based on continuing care in a network of services that includes specialized hospitals, departments of psychiatry of general hospitals, and polyclinics. This program is meeting the needs of patients with minor disorders as well as of chronic patients that frequently have acute episodes, and its services are being extended to the homes of the persons affected.

Primary prevention of dental caries has been stepped up with the limited fluoridation of water supplies and the program for the topical application of fluorides in kindergartens, primary schools, and secondary schools in the field (more than one million children aged 3-14 years have benefited from this form of treatment). The community medicine approach has been extended to the area of dental care, since both the professionals that work in polyclinics and those that work in ad hoc clinics have begun to give sectorized attention to the population. Curative care has been strengthened as the result of the inauguration of additional dental clinics, which in 1975 totaled 109. Also worthy of mention are the efforts made in the area of manpower training, which in 1976 made it possible to graduate 139 dentists, 116 dental technicians, 24 prosthetic technicians, and 217 dental assistants.

In the area of environmental health, studies and measures for the control of water, air and soil pollution have been continued and increased. This is a very important decision in view of the acceleration of industrial development and the use of modern technologies in the agricultural sector of the country. It is estimated that 5,400,000 persons have piped water supply (95% of the urban population and 59% of the total population), and that 2,750,000 have sewer service (50% of the urban population and 29% of the total population). PAHO/WHO continues to give support to the maintenance and operation of stations for environmental contamination sampling which have been extended throughout the country and are being incorporated into the Pan American Network for the Standardized Sampling of Air Pollution. The construction of new communities and basic secondary schools in the field (of the first, 392 are already occupied and another 600 are planned for the next five years) is making it possible to solve many of the environmental health problems that occur in the rural areas; this is due to the fact that all these new communities have inhouse water services (chlorinated water, sewerage systems, and facilities for the treatment of waste water by means of oxidation ponds).

During the last sugar harvest, the primary source of foreign exchange for the country, 25% of the cutting and 95% of the hoisting was mechanized. Furthermore, between 1958 and 1975 the following production increases were achieved: nickel, 200%; petroleum refining, 160%; lubricants, 2,200%; electricity, 250%; steel, 1,000%; fertilizers, 500%; herbicides, 230%; textiles, 250%; footwear, 300%; and cement, 270%. During the same period there was a 600% increase in the use of agricultural tractors, and buildings increased at a rate of more than 25% annually. Parallel with these increases the Ministry of Public Health has been making considerable efforts in the areas of occupational health and industrial hygiene, including the implementation of deficiencies in occupational medicine; the initiation of studies on pneumoconiosis, noise, indices of calorie intake, risks in the use of agricultural machinery, lighting, risks in the use of carbon monoxide, and biological parameters of lead; investigations on pesticides in foodstuffs in coordination with the Plant Health Department; installation of a system of surveillance of chemical and biological contaminants of foodstuffs throughout the country; and contributions to the program for the control of occupational accidents being carried out by the Ministry of Labor.

In the area of animal health the two most important programs are those for the control of bovine brucellosis and tuberculosis, which are close to eradicating both diseases from the country. The Instituto Nacional de Medicina Veterinaria assigns its resources to deal with critical problems, and at each stage the number of areas being declared free of the two above-mentioned zoonoses is increasing.

The purpose of epidemiological surveillance programs is the monitoring of the status of communicable diseases, the early application of control measures when the epidemiological situation requires it, and the evaluation of the results of the activities undertaken. The program is governed by standards issued at the central level, but it is executed through the network of local services which, because of its extent, makes large-scale and deep epidemiological control a practical proposition. The Instituto de Higiene, Epidemiología y Microbiología is supplemented by provincial and regional laboratories which support epidemiological surveillance, identify epidemiological agents, and make serological, bacteriological, parasitological and immunological investigations.

The Ministry of Public Health holds that the success of its programs depends in good measure on the participation of the community. Accordingly, through health education activities the public is kept informed of the importance of hygiene measures, vaccination campaigns, perinatal and maternal and child health care programs and all other activities in which the intervention of the community is of special importance. Health education is carried out at all levels, from kindergarten through university, and benefits from the availability of abundant printed and audiovisual educational material and from the extensive use of radio and television, which media belong entirely to the State. However, it must be emphasized that it is the work of the community mass organizations (CDR, FMC and ANAP) which is responsible for the maximum active participation of the community in health programs.

The special attention which has always been assigned to rehabilitation activities by health authorities led to the establishment of the "Frank País" National Rehabilitation Hospital, which has a workshop/school for the production of prosthetic and orthetic devices and for the training of professional and technical personnel in different related special fields. These plans have received considerable support from the recent establishment of rehabilitation units in the community polyclinics, where the population receive first aid care.

To facilitate the administration of the Health System and to make its services available to the community, support was given in 1976 to a form of organization that follows the principles of regionalization, with an extensive national network of preventive and curative services that covers the entire country and in which care levels are clearly defined, interrelated, and ranked. The basic service units that make up the System (polyclinics and rural hospitals) are the primary elements of that network. The health team of those basic institutions ensures direct contact between the health programs, man, and the environment which surrounds him (home, school, place of work). The other institutions of the System (municipalities, provincial and national levels) serve as support to the primary activities of those basic units. As a whole, all the units are responsible for providing integrated services (prevention-cure-rehabilitation), teaching and research.

The maximum authority - for the formulation of health policy, the preparation of standards, and the management and evaluation of programs - is the responsibility of the central level. The provincial level includes hospitals, public health and epidemiological laboratories, blood banks, units for the teaching of middle-level technicians, and other services. At the regional level there are less sophisticated hospital services, convalescent homes and homes for the aged, dental clinics, regional public health and epidemiological laboratories, drug deposits and eyeglass services, among others. The basic units are the polyclinics and the rural hospitals already mentioned. In 1976 the total number of regionalized units was 2,724.

In the course of 1976 a large number of polyclinics were transformed into community services in which the principles of the "new model of basic care at the primary level" was put into practice. In these community polyclinics care is comprehensive in that four special fields (internal medicine, pediatrics, gynecology-obstetrics and dentistry) work in close harmony; comprehensive, in that it takes into account all the factors (biological, social and environmental) that influence the health/sickness process and unifies programs for the prevention of disease and the recovery of health; sectorized, in that each member of the health team deals with a specific sector of the population and thus strengthens physician/patient relations; and dispensarized, by emphasizing the regulated consultation of patients with certain communicable or noncommunicable diseases. In addition, the new model increases the level of excellence of the care and maximizes the utilization of services through specialized interconsultations in the polyclinics and the hospitals, increases the active participation of the community through the continuing activity of its mass organs, and gives impetus to the health of the family considered as a whole through the periodical visits of members of the health team to all the households in the sector. By the end of 1977 the goal of having one polyclinic for every 25,000 inhabitants will be achieved.

The network of medical care institutions is supplemented by 252 hospitals and 738 direct medical care institutions (polyclinics, maternity homes and homes for the aged and disabled, medical posts, dispensaries, dental clinics and the like). This network has a total of 53,239 beds, and the large-scale plan of additional construction will bring that figure up to 56,639 in 1978. Specialized personnel are responsible for the maintenance and repair of medical equipment and the facilities of the network of services, and carry out their activities both in provincial workshops and in those situated in Havana, where more complicated activities are carried on.

The early completion of health programs illustrates the efficiency of the planning process which is carried out at all levels of the system. The success of this process rests in large measure on reliable statistical data which are provided promptly and are comprehensive and starting from the basic levels, are transmitted through higher levels to the central level, where they are developed, interpreted and returned to the base.

The Dirección Nacional de Estadísticas of the Ministry of Public Health (connected with the Junta Central de Planificación and through it to the other ministries and centralized agencies) provides information necessary for the diagnosis of health problems and for the planning, execution, and evaluation of the programs, advises on and takes part in health research, actively collaborates in the training of specialized personnel for all levels, and coordinates its activities with those of the national information system.

The significant advances and the plans outlined above will continue to require considerable manpower. Health services have about 10,000 physicians (approximately 1.0 per 900 population), 2,100 dentists (1.0 per 4,300 population) and almost 60,000 middle-level technicians; by 1980 it is planned to reach the goal of one physician and one dentist for every 750 and 3,000 population, respectively.

In the last quarter of 1976 the Schools of Medicine and Dentistry were incorporated into the Ministry of Public Health, and this form of organization will facilitate teaching/medical care integration and will make for better coordination between the basic sciences and clinics in undergraduate education.

The training of professional personnel at the undergraduate level is completed by means of residencies in specialties and through graduate courses. The improvement of personnel is conceived of as a continuing process, which involves the further training of all the members of the health team in accordance with their needs and fundamentally in their places of work. Important elements of this program of further training are the Centro y Red Nacional de Información de Ciencias Médicas and the Centro de Educación Médica Audiovisual. During the first half of 1976 the following further training courses were carried out: 30 courses at the central level with 472 participants; 23 courses in National Institutes of Research for 294 participants; 46 courses in the provinces for 509 professional and technical participants; and 23 courses at the central level for 322 nurses and middle-level technicians.

The Ministry of Public Health gives special emphasis to the training of middle-level technicians, and to that end already has 36 schools for nurses, 16 for technologists and 28 for auxiliaries. The enrollment in the school year 1975-1976 amounted to 13,567 students (4,303 in three-year nursing courses; 3,516 in nursing auxiliary courses; and 5,748 in other special fields); 8,732 were students who were beginning their studies, so that no less than 5,500 middle-level technicians will continue to be graduated each year and to be incorporated into the health system. Teaching capacity and quality was strengthened in 1976 through the establishment of the first Instituto Tecnológico de la Salud in the province of Pinar del Río; another seven such institutes are in different stages of development in the interior of the country. Evidence of the fulfillment of the policy of raising the quality of the technical cadres followed by the Ministry was the initiation in 1976 of the degree in nursing at the university level; in addition, it is planned in the immediate future to award a degree in clinical laboratory work. Finally the local training of high-level public health specialists has been made possible through the establishment of the Instituto de Desarrollo de la Salud, where residencies in administration, epidemiology and statistics have already begun.

The development of the pharmaceutical industry is giving basic support to medical care programs. Among the recent successes of this industry, which is under the authority of the Ministry of Public Health, are the modernization of technology; production of new pharmaceutical specialties; increase in the production of antibiotics, blood derivatives and parenteral solutions; improvement in the production of dental materials; progress in the technical-biological control at all production levels; increase in human resources (the country already has 177 university-trained and specialized middle-level technicians); and development of central control laboratories.

The Centro Nacional de Producción de Biológicos "Carlos J. Finlay" is responsible for the preparation of vaccines (typhoid, rabies, BCG and tetanus toxoid), anti-gas gangrene serum, and certain blood derivatives. This center will soon be able to produce bivalent and trivalent vaccines, specific antigens, and other biological products, all of a quality that is internationally acceptable and in an amount that meets the needs of the country.

The First Five-Year Research Plan of the Ministry of Public Health (1976-1980) includes the following fields: morbidity and mortality caused by specific diseases; human reproduction; environment and health; clinical assays; health administration; population and health; and technical development. The Dirección Nacional de Investigaciones has selected topics from among those areas, has organized ad hoc committees, has reviewed the protocols of national studies, and has approved the program of research that was carried out in 1976 in its 10 institutes (381 studies in all).

Cuba collaborates in the health field with countries of the world that face greater problems in the health sector. Many professional and technical health workers are today working enthusiastically to contribute to the health programs being carried out in those countries.

CUBA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	154,230	24.5	128,530	23.0	623,700	57.1
SERVICES TO INDIVIDUALS	154,230	24.5	128,530	23.0	-	-
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	154,230	24.5	128,530	23.0	-	-
ENVIRONMENTAL HEALTH SERVICES	-	-	-	-	623,700	57.1
3300 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH ZOOLOGIES	-	-	-	-	623,700	57.1
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	473,630	75.5	430,295	77.0	467,455	42.9
HEALTH SYSTEMS	273,160	43.6	301,960	54.1	328,135	30.1
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	48,900	7.8	52,500	9.4	56,400	5.2
5100 GENERAL PUBLIC HEALTH SYSTEMS	57,530	9.2	72,140	12.9	75,435	6.9
5200 MEDICAL CARE SYSTEMS	113,635	18.1	115,000	20.6	129,955	11.9
5300 PLANNING	53,095	8.5	62,320	11.2	66,345	6.1
DEVELOPMENT OF HUMAN RESOURCES	60,000	9.6	70,620	12.6	80,300	7.4
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	60,000	9.6	70,620	12.6	80,300	7.4
PHYSICAL RESOURCES	140,470	22.3	57,715	10.3	59,020	5.4
7300 PRODUCTION OF BIOLOGICALS	140,470	22.3	57,715	10.3	59,020	5.4
GRAND TOTAL =====	627,860	100.0	558,825	100.0	1,091,155	100.0

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS				
1977											
PAHO---PR	194,450	-	-	18	48,600	-	129	99,330	-	46,520	-
WHO----WR	153,765	12	-	10	68,000	4,000	39	30,030	-	47,835	-
UNDP	125,415	-	-	11	40,865	900	10	7,875	-	73,342	-
UNFPA	154,230	-	-	30	96,800	-	74	57,430	-	-	-
TOTAL	627,860	12	-	69	254,265	4,900	252	194,665	-	167,697	-
PCT. OF TOTAL	100.0				40.5	.8		31.0	-	26.7	-
1978											
PAHO---PR	191,480	-	-	13	39,000	-	106	93,810	-	58,670	-
WHO----WR	198,815	12	-	10	74,200	4,200	59	52,215	-	64,100	-
UNDP	40,000	-	-	2	8,000	-	8	7,000	-	25,000	-
UNFPA	128,530	-	-	18	61,372	-	76	67,158	-	-	-
TOTAL	558,825	12	-	43	182,572	4,200	249	220,183	-	147,770	-
PCT. OF TOTAL	100.0				32.7	.8		39.4	-	26.4	-
1979											
PAHO---PR	276,600	-	-	18	61,200	-	132	134,640	-	80,760	-
WHO----WR	150,855	12	-	5	64,700	4,400	39	39,780	-	37,675	-
UNDP	663,700	-	-	32	144,000	-	25	25,400	69,200	425,100	-
TOTAL	1,091,155	12	-	55	269,900	4,400	196	199,820	69,200	543,535	-
PCT. OF TOTAL	100.0				24.7	.4		18.3	6.4	49.8	-
PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION											
PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO--WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS											

CUBA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA II CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA II (PR)	<u>Program Planning and General Activities</u>			180	61,875	180	71,995	180	78,615
	Area Representative	0.0273	D-1						
	Administrative Officer	0.4721	P-3						
AMRO-1320 (PR)	<u>Maternal and Child Health and Family Welfare</u>			54	7,820	54	8,250	36	5,920
	Medical Officer	0.0027	P-4						
AMRO-2020 (WR)	<u>Environmental Health Services</u>			54	8,570	54	9,180	43	8,020
	Sanitary Engineer	4.0864	P-5						
AMRO-3120 (PR)	<u>Animal Health and Veterinary Public Health</u>			90	12,950	90	13,690	90	14,450
	Veterinarian	0.3218	P-4						
AMRO-4120 (PR)	<u>Nursing</u>			90	10,220	90	14,290	90	15,090
	Nurse	0.0889	P-4						
AMRO-5220 (PR)	<u>Medical Care Systems</u>			30	3,640	30	3,845	45	6,065
	Hospital Administrator	0.2188	P-4						
AMRO-5320 (WR)	<u>Health Systems - Planning</u>			90	11,275	90	12,100	90	13,005
	Health Planner	4.3674	P-4						
AMRO-5420 (WR)	<u>Statistics and Information Systems</u>			90	13,230	90	14,170	90	15,220
	Statistician	4.0839	P-4						
	Total All Programs			678	129,580	678	147,520	664	156,385
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

CUBA - DETAIL

CUBA-1300, FAMILY HEALTH AND POPULATION DYNAMICS

Important progress has been achieved in the expansion of maternal and child health services; nevertheless, serious differences still persist among the various areas of the country, which it is proposed to minimize.

By the end of the decade it is hoped to reduce infant (especially neonatal) mortality to 20 per 1,000. At the same time, it is considered important to provide information and services designed to promote responsible parenthood. The Government is also interested in perfecting the information system for vital statistics and health activities, through coordinated efforts by the Ministry of Health and the Central Planning Board.

With funds from UNFPA, technical advisory services and training in the country and abroad will be provided, aimed at extending coverage and improving operational effectiveness of maternal and child health services, and making in-depth studies in the area of population dynamics.

TOTAL	30	18	-	TOTAL	UNFPA 154,230	128,530	-
CONSULTANT MONTHS	UNFPA 30	18	-	PERSONNEL-CONSULTANTS	96,800	61,372	-
TOTAL	74	76	-	FELLOWSHIPS	57,430	67,158	-
FELLOWSHIP MONTHS	UNFPA 74	76	-				

CUBA-3300, ZOONOSIS CONTROL

The purposes of this project are to reduce livestock losses due to infectious and contagious zoonoses that can be controlled or eradicated by programs designed to make diagnosis and treatment more effective; to contribute to the economic and social development of the population; to increase gradually the supply of animal proteins in the food of the population; and to reduce imports of drugs and biological products necessary for veterinary medicine. PAHO/WHO and the UNDP are assisting the Institute of Veterinary Medicine in a long-term plan that includes increasing the education, training and updating of veterinarians.

TOTAL	-	-	31	TOTAL	UNDP -	-	623,700
CONSULTANT MONTHS	UNDP -	-	31	PERSONNEL-CONSULTANTS	-	-	139,500
TOTAL	-	-	14	SUPPLIES AND EQUIPMENT	-	-	401,000
FELLOWSHIP MONTHS	UNDP -	-	14	FELLOWSHIPS	-	-	14,000
				COURSE COSTS	-	-	69,200

CUBA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purpose of this project is to cooperate with the Government in health planning and programming within the context of social and economic development and to assist the national health authorities in preparing and carrying out activities requiring international cooperation.

TOTAL	12	12	12	TOTAL	WR 48,900	52,500	56,400
P-5 PAHO/WHO REPRESENTATIVE	WR 12	12	12	PERSONNEL-POSTS	41,000	44,200	47,700
4.0423				DUTY TRAVEL	4,000	4,200	4,400
				COMMON SERVICES	3,900	4,100	4,300

CUBA-5100, DEVELOPMENT OF HEALTH SERVICES

In the country 14 new provinces have been set up and are responsible for the planning and administration of productive enterprises and local social programs. Consequently, the Ministry of Public Health is revising its administrative practices and stepping up the training of the personnel responsible for these tasks at the central and peripheral levels. The new model of primary care to the community will be extended in the next few years to all the polyclinics of the country (more than 360); this will require strengthening of the administrative structures. During 1976 the First National Congress on Health Administration was held and discussed topics relating to organization and services, community medicine, manpower training, programming, production and use of health statistics.

TOTAL	4	4	4	TOTAL	WR 57,530	72,140	75,435
CONSULTANT MONTHS	WR 4	4	4	PERSONNEL-CONSULTANTS	10,800	12,000	13,600
TOTAL	30	30	30	SUPPLIES AND EQUIPMENT	23,630	33,590	31,235
FELLOWSHIP MONTHS	WR 30	30	30	FELLOWSHIPS	23,100	26,550	30,600

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

CUBA-5200, HEALTH CARE

The Ministry of Public Health has consolidated all preventive and curative activities into a single health care program. The "New Medical Care Model at the Primary Level" will be extended to the whole country in community polyclinics including four basic specialties, the assignment of a specific sector of the population to each physician, the periodical checkup of patients with certain diseases, and specialized consultations and the promotion of community participation. The network of 360 polyclinics is completed, on a regional basis, by 260 specialized hospitals and institutes that assign 5 beds to each 1,000 inhabitants, which figure will be increased to 6 per 1,000 inhabitants by 1980. In the next four years, the following programs will be expanded: immunization, epidemiological practice and environmental health; research and care of high-risk pregnant women will be increased, and institutional deliveries, care of premature babies and early treatment of gastroenteritis will be maintained at a high level. The National Nutrition Program assigns priority to the care of selected groups, focuses on problems caused by overnourishment and poorly balanced diets, and contributes to the establishment of a multisectoral food and nutrition policy. In dental health, the fluoridation of water supplies and the topical application of fluorides in secondary schools will be extended. By 1980 the network of services in polyclinics and dental clinics (120) will have one dentist for every 1,000 inhabitants, and hundreds of dental technicians and assistants will be trained.

All these activities are supported by PAHO/WHO, UNICEF and UNFPA, and are aimed at the training of personnel, assistance in revising technical and administrative standards, and provision of essential equipment and materials. In the years ahead, this assistance will be extended to the areas described.

TOTAL		9	9	9	TOTAL	PR	97,825	115,000	129,955
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CONSULTANT MONTHS	PR	9	9	9	PERSONNEL-CONSULTANTS		24,300	27,000	30,600
					SUPPLIES AND EQUIPMENT		27,325	34,900	36,115
TOTAL		60	60	62	FELLOWSHIPS		46,200	53,100	63,240
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	60	60	62					

CUBA-5201, COMMUNITY MEDICINE

The Ministry of Public Health has proposed that all care at the primary level be carried out through a vast network of community polyclinics, the number of which will amount to 422 by the end of 1977. Each of these polyclinics will care for the basic health needs of about 25,000 inhabitants. Each of these community sectors will be provided with care in four basic specialties (pediatrics, gynecology-obstetrics, internal medicine and dentistry), both the preventive and curative aspects of which will be dealt with. Special attention will be paid to all the psycho-biosocial determinants of the health/sickness process; the population will be given access to more complicated and sophisticated levels of specialized care; patient/physician relations will be strengthened; services will be provided at home and in work centers; the population will undergo regular examinations for certain selected diseases that require it and will participate actively through its mass organizations, in the operation of the health services.

TOTAL		5	-	-	TOTAL	PR	15,810	-	-
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	PR	5	-	-	PERSONNEL-CONSULTANTS		13,500	-	-
					FELLOWSHIPS		2,310	-	-
TOTAL		3	-	-					
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FELLOWSHIP MONTHS	PR	3	-	-					

CUBA-5300, DEVELOPMENT OF HEALTH SYSTEMS

The country has recently been reorganized into 14 provinces and 170 municipalities, and these new jurisdictions are responsible for the administration of local economic and social activities, the preparation of detailed budgets, and the financial control by local authorities of productive enterprises and social programs. The Ministry of Public Health is responsible for reorganizing its sectors and levels, improving the systems for the collection and analysis of statistical information, developing methods and structures for the evaluation and control of services and activities, and strengthening the specialized institutes and other units in which the First Five-Year Research Plan (1976-1980) is being executed. The purpose of this program is to assist the Ministry in its efforts to train specialized personnel in statistics, planning, administration and medical information systems; to train research workers in scientific methods applied to the biomedical, epidemiological and social sciences; and to provide students in health sciences with updated scientific information.

TOTAL		4	4	4	TOTAL	PR	53,095	62,320	66,345
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CONSULTANT MONTHS	PR	4	4	4	PERSONNEL-CONSULTANTS		10,800	12,000	13,600
					SUPPLIES AND EQUIPMENT		19,195	23,770	22,145
TOTAL		30	30	30	FELLOWSHIPS		23,100	26,550	30,600
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FELLOWSHIP MONTHS	PR	30	30	30					

CUBA-6000, DEVELOPMENT OF HUMAN RESOURCES

The purpose of this program is to help the country to train the human resources it needs to carry out its health plans. For the training of middle-level medical technicians, the Ministry of Public Health already has 36 nursing schools, 16 schools for technologists and 28 schools for auxiliary personnel; in the period 1975-1976, they had a total enrollment of 13,324. In 1976 the First Technological Institute of Health in the Pinar del Rio Province began its teaching activities, and in the next few years another seven similar provincial institutes will be built. PAHO/WHO is helping to revise the curricula, providing technical assistance in developing courses and seminars and helping to structure degree courses in nursing and clinical laboratory work.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

By 1980 the country plans to have one physician and one dentist for each 750 and 3,000 inhabitants respectively. The incorporation of the medical and dental schools into the Ministry will make it easier to achieve that goal, as will the integration of services and education in specific community polyclinics and the integration of basic sciences, preclinics and clinics in undergraduate teaching.

TOTAL		5	5	5	TOTAL		60,000	70,620	80,300
CONSULTANT MONTHS	PR	-	-	5					
CONSULTANT MONTHS	WR	5	5	-	SUBTOTAL	PR	27,720	14,160	80,300
TOTAL		36	36	40					
FELLOWSHIP MONTHS	PR	36	16	40	PERSONNEL-CONSULTANTS		-	-	17,000
FELLOWSHIP MONTHS	WR	-	20	-	SUPPLIES AND EQUIPMENT		-	-	22,500
					FELLOWSHIPS		27,720	14,160	40,800
					SUBTOTAL	WR	32,280	56,460	-
					PERSONNEL-CONSULTANTS		13,500	15,000	-
					SUPPLIES AND EQUIPMENT		18,780	23,760	-
					FELLOWSHIPS		-	17,700	-

CUBA-7200, DEVELOPMENT OF THE PHARMACEUTICAL INDUSTRY AND MEDICAL EQUIPMENT

The Ministry of Public Health assigns special importance to the control of the production of drugs and medicines. A recent evaluation revealed the progress made in technico-chemico-biological control, the training of specialized manpower (177 university-trained and middle-level technicians are already available), the development of central control laboratories, the establishment of standard methods, research on new methods, and supervision of personnel.

The Carlos J. Finlay National Center for the Production of Biological Products, which is devoted to the production of microbial and viral vaccines, sera, antigens, culture media, blood derivatives and other products required for the implementation of the health plans, continues to receive technical and administrative assistance and equipment from PAHO/WHO and UNDP. A recent tripartite review stressed the significant advances made in staffing, equipping of animal facilities, and training of professional and technical workers.

The development of the infrastructure for preventing the deterioration and for the repair of medical equipment is based on the training of middle-level technicians in courses, the duration of which is from two to three years, and which deal specifically with electronic, electromechanical and X-ray equipment.

TOTAL		1	1	1	TOTAL	WR	15,055	17,715	19,020
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		9	9	9	SUPPLIES AND EQUIPMENT		5,425	6,750	6,440
FELLOWSHIP MONTHS	WR	9	9	9	FELLOWSHIPS		6,930	7,965	9,180

CUBA-7300, MODERNIZATION OF LABORATORY SERVICES

Project activities began in 1972 and have continued throughout the first program period. For the period 1977-1980 it is proposed to complete the activities in progress and undertake new activities of the following types: development of diagnostic preparations not currently manufactured at the production center (viral antigens, reactive protein C, hemolysin, lyophilized complement, etc.); improvement of existing facilities for and the technical quality of dehydrated culture media, and expansion of the production of measles vaccine; expansion of the Laboratory Animal Breeding Farm; purchase of books and equipment for a library which will meet the Center's information and development requirements; development and control of combined bacterial vaccines; training of personnel in the areas of proposed development; and hiring of experts to advise on the items to be produced and the facilities to be established or improved under the expanded project.

TOTAL		11	2	1	TOTAL	UNDP	125,415	40,000	40,000
CONSULTANT MONTHS	UNDP	11	2	1	PERSONNEL-CONSULTANTS		40,865	8,000	4,500
TOTAL		10	8	11	DUTY TRAVEL		900	-	-
FELLOWSHIP MONTHS	UNDP	10	8	11	SUPPLIES AND EQUIPMENT		73,342	25,000	24,100
					FELLOWSHIPS		7,875	7,000	11,400
					MISCELLANEOUS COSTS		2,433	-	-

DOMINICAN REPUBLIC

The Dominican Republic occupies the eastern two thirds of the island of Santo Domingo (Hispaniola). This island belongs to the Greater Antilles Group and is situated in the center of the Caribbean area. The Dominican Republic covers an area of 48,442 Km² and has a population of 4,696,800 inhabitants (1975); it is estimated that by 1980 the population will reach 5,787,100. In 1975, 45.3% of the population was urban. Fertility rates are traditionally high in the country but have been declining sharply for women in all age groups between 15 and 49, according to preliminary data from the National Fertility Survey made in 1975. The present increase in family planning programs, together with the country's high rate of economic growth, warrant the assumption that the downward trend will continue in the years ahead. The birth rate, which was 48 live births per 1,000 inhabitants in 1965, is projected at 35 for 1975, and the rate of natural growth, 3.4 in 1965, is estimated at 2.3 for 1975.

The country's rate of economic growth was high in the last seven years, averaging 10% annually from 1969 to 1974. In 1975 growth was affected by adverse conditions that reduced agricultural production, but even so the rate of 6.2% that year was one of the highest in Latin America and was twice the rate of population increase.

Economic growth has brought some changes in the structure of the GDP, mainly attributable to stepped-up development in certain productive activities receiving substantial amounts of investment, both public and private. These activities included mining, construction, industry and trade, which registered growth rates averaging more than 12% per year. Conversely, the agriculture sector's participation in the GDP dropped from 20% in 1973 to 18% in 1975. Mining has experienced a substantial upsurge, accounting for 6.3% of total GDP in 1975, and its rate of growth is increasing sharply. Sugar is the main export product of the country. The drop in price of this product on the world market in 1976 brought unfavorable consequences for the economy with repercussions on the progress of health programs.

Since 1970 health conditions have been improved considerably and increased efforts have been made to provide adequate health care to wide segments of the population, especially in scattered rural communities and marginal areas of cities. According to latests available figures, life expectancy at birth during the period 1970-1975 was 53.2 years for males and 56.1 for females. The corresponding projections for 1975-1980 are 55.7 and 58.8 years, respectively.

The general mortality rate for 1975 was 5.4 per 1,000 inhabitants, and the infant mortality rate in 1974 was 44.4 per 1,000 live births, according to official statistics reflecting an undetermined degree of underregistration. It is estimated that medical certification of the cause of death is available for 35% of all deaths. In 40% of the certificates, the symptoms or causative pathology are ill-defined.

The national health policy for the decade was formulated in 1973 and its goals adjusted to those of the Ten-Year Health Plan for the Americas. The general objectives of the policy are to increase life expectancy at birth by five years and to provide regular minimum basic medical care to the rural and scattered populations. The specific targets are to control or eradicate communicable diseases; maintain smallpox eradication; reduce mortality from measles and pertussis to 1.0 per 100,000 inhabitants; reduce mortality from tetanus from 8.0 to 3.0 per 100,000 inhabitants; complete the malaria eradication program throughout the country; reduce deaths from tuberculosis to 50% of the present rate; and establish an intersectoral maternal and child health policy in order to reduce infant mortality by 25%, mortality in children in the 1-4 year age group by 10%, and maternal deaths by 30%.

It is also proposed to step up nutrition programs in order to reduce the level of Grade III protein-calorie malnutrition by 85% and Grade II by 30% in the under-five-year age group; provide potable inhouse water supply for 70% of the urban population and 30% of the rural population, and sewerage services for 40% of the urban population; reduce the incidence of the principal zoonoses in cattle so as to increase the production of animal protein; control the quality of food products in order to reduce the damage resulting from food contamination; regionalize the health services of the country over a five-year period; establish epidemiological services and regional laboratories; and develop a program of manpower training designed to meet the requirements of the health sector in this decade.

Communicable diseases are still the principal cause of death, especially in the under-five-year age group. Out of a total of 3,722 reported deaths, these diseases were responsible in 1974 for 24% of those with a definite diagnosis and 14% of those from all causes, including "ill-defined symptoms and pathologies." The overall death rate from communicable diseases was 84 per 100,000 inhabitants. The leading cause within this group was enteritis and diarrhea, with a rate of 45 per 100,000. Tetanus has declined but continues to affect the population, particularly the under-one-year group, which accounted for 68% of all deaths from this cause.

The four diseases covered by the International Health Regulations (plague, cholera, yellow fever and smallpox) do not occur in the country. The tuberculosis control program is being incorporated into the activities of the general health services as the process of regionalization, started in 1973, proceeds.

In order to develop an efficient system of epidemiologic surveillance and communicable disease control, regional epidemiologic services will be organized in the country's five health regions; campaigns for achieving useful levels of immunization against diseases preventable by vaccination will be conducted, as will be activities for the control of the more prevalent communicable diseases, including the improvement of the Tuberculosis Control Program and the integration of its activities into the general health services as the process of regionalization proceeds.

Malaria eradication is at an advanced stage; 91% of the originally malarious area (99.3% of the country's total area) is in the maintenance phase, and 2.2% in the consolidation phase. In terms of population distribution, 96.6% of the people live in the maintenance-phase areas, 0.9% in consolidation-phase areas, 1.8% in attack-phase areas, and 0.7% in nonmalarious areas. In addition to the 99 cases detected during the first half of 1976, of which 39 (11 autochthonous and 28 imported) were investigated, the situation in maintenance-phase areas was affected in July and August by the diagnosis of 37 cases in three municipalities of San Cristóbal Province and the District of Santo Domingo. The high receptiveness and vulnerability in a large number of localities explains the need to maintain strict epidemiologic surveillance over all of the country's malarious areas, regardless of the stage at which they are classified.

The nutrition status of the population is one of the most serious social and medical problems of the country. In 1974 some of the results of the 1969 National Nutrition Survey were checked and updated. It was found that, although there had been some improvements (protein-calorie malnutrition in children having decreased from 75 to 58%), much of the information based on biochemical studies showing low values and low nutrient intakes was still valid. According to the food balance sheet, available foodstuffs were deficient in calories, proteins, vitamin A and riboflavin. To improve the nutrition status of the population, the Government plans to adopt a national food and nutrition policy providing for integrated and coordinated activities by the health, agriculture and education sectors.

By 1974, 60% of the urban population had connections to water systems and 22.2% had ready access to them; 11.2% of the rural population had water service and 14.8% had easy access to a water system; 22% of the urban population had sewer service. The Government is continuing to execute the Rural Water Supply Plan, which provides for the construction of 180 rural water systems, and is negotiating with international organizations the financing of the construction of water systems to serve 220 communities. At the same time a start has been made on the Urban Water Supply Plan, and a program for the application of water rates is under way.

In 1975, 66% the urban population was served through inhouse water connections and 22% had easy access to the distribution systems. Among the rural population, 11% had connections to water systems and 15% had easy access. In regard to sewage and excreta disposal, 27% of the urban population had access to a sewer system and 16% of the rural population was served by an individual excreta disposal system of some kind.

With financial assistance from the IDB and technical assistance from FAO/WHO, the Government is carrying out an ambitious project to supply potable water to the major cities and rural communities through the National Water Supply and Sewerage Institute, the Santo Domingo Water and Sewerage Corporation, the Dominican Municipal League, and the municipal government of Santiago de los Caballeros.

To achieve the aims of the health policy, the Government has been making efforts in recent years to organize a national health system based on regionalization. The country has been divided into six health regions, including the District of Santo Domingo. This process was started in 1973, and by 1976 all six regions had been established and work begun on the first evaluation of Regions II (Santiago de los Caballeros) and V (San Pedro de Macoris). A general evaluation of the program is scheduled to be made in 1977 for the purpose of formulating a program aimed at consolidating and strengthening the Division of Planning, Programming and Evaluation of the Ministry of Public Health and Social Welfare (SESPAS).

Concurrently with regionalization, a number of vertically organized programs are being developed with technical and financial assistance from bilateral and multinational agencies (AID, UNFPA and PAHO/WHO) with the aim of solving those problems identified as priority areas. These programs include the National Family Planning Program, the Nutrition Program, and the SESPAS Basic Health Services and Institutional Development Program. An agreement was recently signed with the World Bank for a loan to assist in financing a three-year family welfare program in two health regions (Bani and San Pedro de Macoris). Special mention should be made of the Basic Health Services Program, the aim of which is to extend health services to the remotest rural areas by using health promoters and enlisting extensive community participation. By July 1976, 279 promoters had been trained and 211 were performing field services in the metropolitan zone and in Health Region IV (Barahona).

The PAHO/WHO technical cooperation program was developed in close consultation with the national authorities, taking into account the national health policy, the goals of the Ten-Year Health Plan for the Americas, and programs now in progress. An effort has been made to take advantage of assistance provided by other agencies and to avoid duplications. Particular attention has been paid to institutional development of the Ministry of Public Health and to manpower training through strengthening of the pertinent division and direct assistance to universities. In the field of dental health, an ambitious project has been initiated to lay the groundwork for extension of oral health services to the rural areas and the marginal areas of cities.

DOMINICAN REPUBLIC
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	249,455	43.5	230,995	39.9	272,610	41.5
SERVICES TO INDIVIDUALS	48,965	8.6	91,245	15.7	123,200	18.8
COMMUNICABLE DISEASES						
0200 MALARIA	41,665	7.3	41,245	7.1	43,200	6.6
1600 DENTAL HEALTH	7,300	1.3	50,000	8.6	80,000	12.2
ENVIRONMENTAL HEALTH SERVICES	120,995	21.1	55,565	9.6	59,685	9.1
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	-	-	-	-	-	-
2100 WATER SUPPLY AND EXCRETA DISPOSAL	69,240	12.1	-	-	-	-
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
PROGRAM PLANNING AND GENERAL ACTIVITIES	51,755	9.0	55,565	9.6	59,685	9.1
COMPLEMENTARY SERVICES	79,495	13.8	84,185	14.6	89,725	13.6
4100 NURSING	32,400	5.6	34,600	6.0	37,000	5.6
4300 EPIDEMIOLOGICAL SURVEILLANCE	47,095	8.2	49,585	8.6	52,725	8.0
II. DEVELOPMENT OF THE INFRASTRUCTURE	324,594	56.5	348,615	60.1	383,365	58.5
HEALTH SYSTEMS	249,447	43.4	272,375	47.0	297,870	45.5
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	87,540	15.2	97,150	16.8	102,390	15.6
5100 GENERAL PUBLIC HEALTH SYSTEMS	83,880	14.6	127,025	21.9	143,780	22.0
5500 MANAGEMENT SYSTEMS	78,027	13.6	48,200	8.3	51,700	7.9
DEVELOPMENT OF HUMAN RESOURCES	75,147	13.1	76,240	13.1	85,495	13.0
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	63,115	11.0	69,240	11.9	76,095	11.6
6200 MEDICINE	6,332	1.1	-	-	-	-
6300 NURSING	-	-	-	-	-	-
6400 ENVIRONMENTAL SCIENCES	5,700	1.0	7,000	1.2	9,400	1.4
GRAND TOTAL	574,049	100.0	579,610	100.0	655,975	100.0

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER	
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS					AMOUNT
	\$				\$	\$		\$	\$	\$	\$	
1977												
PAHO---PR	258,470	60	24	5	224,720	13,170	40	30,800	5,000	5,780	-	19,000
PW	69,240	12	-	13	60,000	1,000	11	8,240	-	-	-	-
PG	48,027	-	-	10	35,320	1,003	-	-	-	-	-	11,704
PH	6,332	-	-	-	-	-	-	-	-	6,332	-	-
WHO---WR	101,980	24	-	7	80,500	1,800	21	16,170	1,000	2,510	-	-
UNDP	50,000	10	-	-	44,300	1,500	4	3,000	-	1,200	-	-
TOTAL	574,049	106	24	35	444,840	18,473	76	58,210	6,000	15,822	-	30,704
PCT. OF TOTAL	100.0				77.5	3.2		10.2	1.0	2.8	-	5.3
1978												
PAHO---PR	312,785	60	24	3	236,630	10,490	40	35,400	2,750	7,565	-	19,950
WHO---WR	116,825	24	-	7	102,900	3,200	7	6,195	1,000	3,530	-	-
UNDP	150,000	12	-	3	70,320	-	14	26,810	18,000	34,870	-	-
TOTAL	579,610	96	24	13	409,850	13,690	61	68,405	21,750	45,965	-	19,950
PCT. OF TOTAL	100.0				70.7	2.4		11.8	3.8	7.9	-	3.4
1979												
PAHO---PR	334,095	60	24	3	250,440	10,840	40	40,800	3,000	8,065	-	20,950
WHO---WR	131,880	24	-	7	111,500	3,600	10	10,200	1,000	5,580	-	-
UNDP	190,000	12	-	10	109,320	-	17	22,900	18,000	40,190	-	-
TOTAL	655,975	96	24	20	471,260	14,440	67	73,900	22,000	53,825	-	20,950
PCT. OF TOTAL	100.0				71.8	2.2		11.2	3.4	8.2	-	3.2
PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION												
PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WD-GRANTS AND OTHER FUNDS												

DOMINICAN REPUBLIC
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA II CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA II (PR)	<u>Program Planning and General Activities</u>			180	61,875	180	71,995	180	78,615
	Area Representative	0.0273	D-1						
	Administrative Officer	0.4721	P-3						
AMRO-1320 (PR)	<u>Maternal and Child Health and Family Welfare</u>			36	5,380	36	5,650	54	8,685
	Medical Officer	0.0027	P-4						
AMRO-2020 (WR)	<u>Environmental Health Services</u>			54	8,470	54	9,070	65	11,520
	Sanitary Engineer	4.0864	P-5						
AMRO-3120 (PR)	<u>Animal Health and Veterinary Public Health</u>			90	12,950	90	13,690	90	14,450
	Veterinarian	0.3218	P-4						
AMRO-4120 (PR)	<u>Nursing</u>			90	10,220	90	14,290	90	15,090
	Nurse	0.0889	P-4						
AMRO-5220 (PR)	<u>Medical Care Systems</u>			120	14,560	120	15,355	105	14,145
	Hospital Administrator	0.2188	P-4						
AMRO-5320 (WR)	<u>Health Systems - Planning</u>			90	12,325	90	13,200	90	14,150
	Health Planner	4.3674	P-4						
AMRO-5420 (WR)	<u>Statistics and Information Systems</u>			90	14,130	90	15,070	90	16,160
	Statistician	4.0839	P-4						
	Total All Programs			750	139,910	750	158,320	764	172,815
	=====			=====	=====	=====	=====	=====	=====

* The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

DOMINICAN REPUBLIC - DETAIL

DOMINICAN REPUBLIC-0200, MALARIA ERADICATION

The results obtained by the National Malaria Eradication Service are very satisfactory and transmission has been successfully interrupted over practically the entire national territory; 91.4% of the country is in the maintenance phase, 2.3% in the consolidation phase, 4.5% in the attack phase, and the balance of 1.8% corresponding to the nonmalarious area. The persistence of positivity in the frontier region of Pedernales is declining. On the other hand, the program's vulnerability as a result of the high incidence of imported cases makes it necessary to maintain continuing and effective epidemiological surveillance.

In the 1977-1979 period half-yearly cycles of spraying with DDT will be maintained in the five frontier municipalities in the attack phase, epidemiological surveillance activities will be continued throughout the country; and further support will be given to wide-ranging measures to expand health services to rural areas.

TOTAL		12	12	12	TOTAL	PR	41,665	41,245	43,200
P-3 SANITARY ENGINEER	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.4565					DUTY TRAVEL		4,270	2,640	2,640
					SUPPLIES AND EQUIPMENT		3,780	3,065	3,065

DOMINICAN REPUBLIC-1600, BASIC ODONTOLOGY

The general purpose of this project is to lay the foundations for the implementation, at the national level, of programs designed to raise the level of oral health through the application of preventive measures, reorientation of dental care systems, and promotion of human resources. It includes the fluoridation of water supplies in six communities with more than 50,000 inhabitants; large-scale educational programs in dental health; design and application of new dental care systems; and reorientation of dental curricula. The Government has made a request to UNDP for financial assistance beginning in 1978.

TOTAL		2	-	-	TOTAL	PR	7,300	-	-
CONSULTANT MONTHS	PR	2	-	-	PERSONNEL-CONSULTANTS		5,400	-	-
					DUTY TRAVEL		1,900	-	-

DOMINICAN REPUBLIC-1601, UNIVERSAL DENTAL CARE

The objective of this project is to implement, at the national level, dental health programs by introducing -beginning with selected areas- specially designed, very cheap mass preventive measures, complemented by programs for the fluoridation of drinking-water and for basic education in oral hygiene.

TOTAL		-	3	10	TOTAL	UNDP	-	50,000	80,000
CONSULTANT MONTHS	UNDP	-	3	10	PERSONNEL-CONSULTANTS		-	12,000	45,000
TOTAL		-	6	10	SUPPLIES AND EQUIPMENT		-	18,000	20,000
FELLOWSHIP MONTHS	UNDP	-	6	10	FELLOWSHIPS		-	5,000	10,000
					GROUP TRAINING		-	15,000	5,000

DOMINICAN REPUBLIC-2101, WATER AND SEWER ADMINISTRATION IN SANTO DOMINGO

The purpose of this project is to provide the Corporación del Acueducto y Alcantarillado de Santo Domingo with advisory services in organizing its technical and administrative units, and to assist this organism in its institutional development. For this purpose, short-term consultants, a project manager, and fellowships will be provided.

TOTAL		12	-	-	TOTAL	PW	69,240	-	-
P-5 PROJECT MANAGER	PW	12	-	-	PERSONNEL-POSTS		25,000	-	-
.4276					PERSONNEL-CONSULTANTS		35,000	-	-
TOTAL		13	-	-	DUTY TRAVEL		1,000	-	-
CONSULTANT MONTHS	PW	13	-	-	FELLOWSHIPS		8,240	-	-
TOTAL		11	-	-					
FELLOWSHIP MONTHS	PW	11	-	-					

DOMINICAN REPUBLIC-3100, VETERINARY PUBLIC HEALTH

The purpose of this project is to provide the health and agriculture authorities with technical cooperation in controlling the principal zoonoses (rabies, brucellosis and tuberculosis) and in food hygiene and control programs. It also covers the establishment and strengthening of the National Rabies Center, the preparation and implementation of the National Program for the Eradication of Rabies and Control of Other Zoonoses, and personnel training.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	----	----	----		----	-----	-----	-----
							\$	\$	\$
TOTAL		12	12	12	TOTAL	PR	51,755	55,565	59,685
P-4 VETERINARIAN .4037	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		1,500	1,500	1,500
TOTAL		14	14	14	FELLOWSHIPS		10,780	12,390	14,280
FELLOWSHIP MONTHS	PR	14	14	14					

DOMINICAN REPUBLIC-4300, EPIDEMIOLOGY

The specific objectives of this project are the gradual installation of regional epidemiological services in the six health regions of the country, with emphasis on the use of an epidemiological surveillance system; improvement of the program of immunization against diseases preventable by vaccination; and control of the most prevalent and important communicable diseases, including the Tuberculosis Control Program and its incorporation into the general health services.

Provision is made for the expansion of activities in the immediate future. Negotiations are under way for the signature of a Letter-Agreement on dengue research in which the University of Miami will participate, and of another Letter-Agreement on dengue and *Aedes aegypti* surveillance activities, in which the Center for Disease Control in Atlanta will participate and provide financial assistance. Initial contacts have also been made with a view to obtaining the assistance of PAHO/WHO and CAREC in the epidemiological programs being conducted in the country.

TOTAL		12	12	12	TOTAL	PR	47,095	49,585	52,725
P-4 EPIDEMIOLOGIST .0955	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		1,000	1,100	1,200
TOTAL		6	6	6	SEMINAR COSTS		2,000	1,500	1,500
FELLOWSHIP MONTHS	PR	6	6	6	FELLOWSHIPS		4,620	5,310	6,120

DOMINICAN REPUBLIC-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to plan the PAHO/WHO general work program in accordance with the health component of the national development policy and strategies and to establish coordination and complementation of activities of the different projects that will make up the program of the Organization and of this program with the other international technical assistance programs in the health sector.

TOTAL		36	36	36	TOTAL	PR	87,540	97,150	102,390
P-5 PAHO/WHO REPRESENTATIVE .0441	PR	12	12	12	PERSONNEL-POSTS		65,040	73,200	77,440
G-6 SECRETARY .4810	PR	12	12	12	DUTY TRAVEL		3,500	4,000	4,000
G-4 SECRETARY .4038	PR	12	12	12	COMMON SERVICES		19,000	19,950	20,950

DOMINICAN REPUBLIC-5100, REGIONALIZATION OF HEALTH SERVICES

The purposes of this project are to establish in the Department of Health administrative mechanisms for evaluating the regionalization process which has been in operation for the last three years; to prepare and implement a consolidation plan ensuring the coordination and continuity of the vertical programs being carried out, both with national funds and with external financial aid; to evaluate the health regionalization program and to analyze the administrative structure of the Department of Public Health and Social Welfare; to design the frame of reference for the institutional development program; and to strengthen the Division of Planning, Programming and Evaluation.

TOTAL		34	36	36	TOTAL		146,280	209,825	232,480
P-4 ADMIN. METHODS OFFICER 4.4811	WR	12	12	12	SUBTOTAL	WR	96,280	109,825	122,480
P-4 MEDICAL OFFICER 4.4812	UNDP	10	12	12					
P-3 NURSE 4.0956	WR	12	12	12	PERSONNEL-POSTS		61,600	81,900	87,700
TOTAL		6	6	6	PERSONNEL-CONSULTANTS		16,200	18,000	20,400
CONSULTANT MONTHS	WR	6	6	6	DUTY TRAVEL		1,800	3,200	3,600
TOTAL		25	15	17	SUPPLIES AND EQUIPMENT		510	530	580
FELLOWSHIP MONTHS	WR	21	7	10	FELLOWSHIPS		16,170	6,195	10,200
FELLOWSHIP MONTHS	UNDP	4	8	7	SUBTOTAL	UNDP	50,000	100,000	110,000
					PERSONNEL-POSTS		44,300	58,320	64,320
					DUTY TRAVEL		1,500	-	-
					SEMINAR COSTS		-	18,000	18,000
					SUPPLIES AND EQUIPMENT		1,200	16,870	20,180
					FELLOWSHIPS		3,000	6,810	7,500

FUND	1977	1978	1979
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FUND	1977	1978	1979
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	\$	\$	\$

DOMINICAN REPUBLIC-5500, ADMINISTRATIVE REFORM IN THE MINISTRY OF HEALTH

The purpose of this project is to assist the Government in reviewing the administrative structure of the Department of Public Health and Social Welfare; drawing up general plans for its future development; preparing a long-term plan of technical co-operation to enable it to play its part in the Health Sector Development Plan; and adopting such measures as the Government and AID consider necessary.

TOTAL	10	-	-	TOTAL	PG	48,027	-	-
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CONSULTANT MONTHS	PG	10	-	-	PERSONNEL-CONSULTANTS	35,320	-	-
					DUTY TRAVEL	1,003	-	-
					PROGRAM SUPPORT COSTS	11,704	-	-

DOMINICAN REPUBLIC-6000, DEVELOPMENT OF HUMAN RESOURCES

The purposes of this project are to assist the recently established Division of Health Manpower of the Department of Public Health and Social Welfare in developing a national health manpower policy in which the sectors producing and using such manpower will participate, and to assist the universities in carrying out their plans for reform and the other institutions training health personnel at different levels.

TOTAL	12	12	12	TOTAL	PR	63,115	69,240	76,095
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P-3 NURSE EDUCATOR .4440	PR	12	12	12	PERSONNEL-POSTS	33,615	35,540	37,495
					PERSONNEL-CONSULTANTS	8,100	9,000	10,200
					DUTY TRAVEL	1,000	1,250	1,500
TOTAL		3	3	3	SEMINAR COSTS	3,000	1,250	1,500
-----	-----	-----	-----	-----	SUPPLIES AND EQUIPMENT	2,000	4,500	5,000
CONSULTANT MONTHS	PR	3	3	3	FELLOWSHIPS	15,400	17,700	20,400
TOTAL		20	20	20				
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FELLOWSHIP MONTHS	PR	20	20	20				

DOMINICAN REPUBLIC-6201, MEDICAL EDUCATION AND RESEARCH

Teaching equipment and supplies are provided to the School of Medicine of the Universidad Autónoma de Santo Domingo, using funds granted to PAHRE from the estate of Dr. William A. Morgan.

TOTAL	PH	6,332	-	-
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SUPPLIES AND EQUIPMENT		6,332	-	-

DOMINICAN REPUBLIC-6400, SANITARY ENGINEERING EDUCATION

The primary purpose of this project is to strengthen sanitary engineering education with a view to providing professional and technical personnel working in that field with better training.

TOTAL	1	1	1	TOTAL	WR	5,700	7,000	9,400
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CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS	2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT	2,000	3,000	5,000
					COURSE COSTS	1,000	1,000	1,000

ECUADOR

The Republic of Ecuador lies on the equatorial line. It covers an estimated area of 270,670 km². The Cordillera of the Andes crosses the country from north to south and divides it into three natural regions with well-defined geographical, population and ecological characteristics that differ from one another: the coastal area, the highlands and the Amazon jungle.

In the Pacific Ocean, approximately 1,000 km to the west, lie the Galapagos Islands in which special conditions obtain because of their isolation and difficult access as well as because of their tourist interest.

The total estimated population in 1976, based on the 1974 census, was 6,959,670 inhabitants. Since only 41.3% of the inhabitants live in urban areas, the population of Ecuador may be considered eminently rural and primarily lives in small rural communities with less than 2,000 population or as scattered population.

In 1975, 44.58% of the total population of the country was under 15 years of age. In 1974, life expectancy at birth was 61.5 years, and the birth rate, 37.5 per 1,000 population.

In the same year, the general mortality rate was 9.9 per 1,000 population, of which nearly half (49.2%) represented deaths in children under five years of age which were caused, for the most part, by communicable diseases and diseases of the digestive and respiratory systems, whose impact was increased by malnutrition and low organic resistance. Infant mortality was 70.2 per 1,000 live births. However, these figures are unreliable because there is manifest underregistration of vital statistics, which is estimated at 12% for births and 19% for deaths. This situation occurs primarily in the rural areas, where there are not sufficient facilities for the pertinent registration or appropriate means of enforcing legal provisions. Furthermore, more than 25% of the deaths were of people who received no medical attention during their final illness.

The GDP, which in 1960 was US\$1,043.3 million, or US\$239.50 per capita per year, rose in 1974 to US\$3,476 million or US\$508 per capita per year. This figure, however, is an average, and the per capita income of a large proportion of the population is believed to be lower.

To accelerate the economic and social development of the country and to take advantage of the boom due to oil exports, the Government has drawn up and put into effect the Overall Transformation and Development Plan 1973-1977, which provides for the application of new revenue to the execution of large-scale socioeconomic infrastructure programs. The country is making use of its increased debt-carrying capacity to obtain external loans that will enable it to further accelerate the economic take-off; promote the rational development of natural resources; increase production; promote industrial development; and improve the living conditions of Ecuadorians and gradually raise the level of living and well-being of the population.

A health policy has been formulated which takes into account the need to integrate health sector activities, decentralize the execution of programs, and make preferential use of new investments in extending service coverage to the underserved population. On the basis of this policy, the Health Plan 1974-1977 was prepared. This plan is also in line with the recommendations and goals of the Ten-Year Health Plan for the Americas. The Ministry of Health, which was recently established (1967), has taken major steps to ensure its institutional strengthening and to increase its capacity to carry out nationwide programs.

In 1972 the General Health Directorate and a number of independent or private technical assistance and charitable institutions, which until then had been responsible for the provision of health care, were integrated into the structure of the Ministry. In addition, a new phase of cooperation and coordination of the Ministry, the Institute of Social Security and other national agencies that form part of the sector was begun.

Closer relations were also established with external cooperation agencies, the purpose being to use the assistance they provide to the sector in areas designated as priority areas in the Health Policy and the Health Plan.

Morbidity and mortality rates are still high. The principal reasons for this are the prevalence of communicable diseases; environmental pollution; nutritional deficiencies; and lack of family health care, especially in rural areas and in shantytowns, which reflects the limited service coverage.

To improve the state of health in the country, the Government has decided, in accordance with the Health Policy and the Health Plan, to designate the following program areas as priorities for the sector: disease prevention and control; health care and family welfare; environmental health; development of health services with emphasis on extension of coverage to rural areas; and the training of health manpower.

In the area of disease control, the objective is to reduce the incidence and prevalence of those diseases that cause most harm to the population and which can be brought under control or eradicated, including diseases preventable by immunization such as whooping cough, tetanus, poliomyelitis and measles. These diseases are being brought under control through a wide-ranging program of immunizations; smallpox and *Aedes aegypti* have been eradicated; malaria is under control in most of the originally malarious area, except in two areas located in the Provinces of Esmeraldas and Napo, where attack measures are being increased; control programs are also being conducted to reduce morbidity and mortality caused by infectious and contagious diseases such as tuberculosis, sexually transmitted diseases, plague, leprosy, enteric diseases and zoonoses; laboratory services are being expanded and improved, in particular diagnosis, analysis control, production of biologicals and research.

In the area of health and family welfare, the activities undertaken are designed to reduce risks associated with reproduction, growth and development, and to promote more extensive and better care of the family group, with special emphasis on mothers and children, and at the same time closer interrelation with the family and active participation of the community in the program is being sought. Coverage targets have been established for prenatal care, maternity care, postpartum care, fertility regulation, and detection of cervical cancer, and these are being gradually reached; to improve the nutritional status of mothers and children, steps have been taken to distribute a food supplement, milk-oatmeal, which will soon be processed in a special plant; as part of family health care, dental services have been extended to rural areas, for which purpose auxiliary personnel and simplified equipment and instruments are being used; parallel with these activities, health education is being stepped up and seeks to improve health and food practices and also to make regular use of health services a habit.

Environmental sanitation activities have received special attention from the health authorities. A law for the control of environmental pollution has been enacted, the powers of the Environmental Sanitation Subdepartment have been broadened, and the Inter-Departmental Committee for the Control of Environmental Pollution has been set up; appreciable expansion of the water supply and sewerage program has taken place in urban areas and rural areas; a number of municipalities in the various provinces of the country have received considerable help from the Ministry of Health, both in projects and in loans, in solving problems connected with the collection and disposal of solid waste; 10 stations for the monitoring of environmental pollution have been set up. The total amount of the investments earmarked for this purpose exceeds US\$100 million.

The program for the development of health services received considerable impetus from the decision of the Government to renew and expand the physical infrastructure which was embodied in an ambitious plan of construction and remodeling in rural and urban areas. This plan should serve as a basis for a program for the extension of coverage and improvement of the quality of care provided and will be supplemented by the reorganization of the entire health system and the redesign of the administration and information subsystems. External funds and loans have enabled the Ministry of Health to plan an investment of \$4,000 million, or US\$160 million, in service infrastructure. In order to make more and better use of the services, various strategies are being tried with a view to establishing a sound and lasting link between the informal health system, which exists in various forms in the communities, and the formal system, represented by the services of the Ministry of Health and the other institutions of the health sector; and to achieve the purpose of the plan and to speed up its execution, a methodology has been developed for the rational study of service needs throughout the country, based on the establishment of care levels and the rational location of each type of establishment according to needs; furthermore, modular architectural models have been designed for various types of health services and equipment models for each module.

The available manpower is insufficient to meet the present demand for services, despite the fact that it has been substantially increased as a result of the use of graduates of health sciences schools that must complete their rural practice. In view of this situation, and bearing in mind the fact that the plans prepared call for a substantial increase in all resources, including especially human resources whose education and development requires more time and dedication, the Government is seeking more efficient responses in teaching in order to adapt their education and training to the objectives of coverage and quality of services offered to the population. In this regard, the major effort will be aimed at training the personnel to be assigned to primary health care and to the in-service training of personnel to enable them to achieve the highest possible level of efficiency in their duties.

In order to facilitate the policy-setting function of the Ministry, the central level has been reorganized and new units established, such as the Department of Family Health and the Department of Health Control and Surveillance, and the existing units have been functionally located.

External cooperation is well received by the Government as a contribution to the effort the country is making to provide the Ecuadorian population with greater opportunities for economic and social progress and better environmental conditions and facilities raising the standard of living and increasing individual, family, and collective well-being. In addition to PAHO/WHO, the Government of Ecuador is receiving cooperation in the health sector from UNDP, which is financing several projects; UNFPA, which is assisting the family health program; and UNICEF, which is providing some biologicals for the immunization programs and equipment for health services in three provinces under an integrated social program; the IDB, which has extended loans for the foot-and-mouth disease control program and for a feasibility study of the rural health infrastructure program; and CARE and WFP, which are providing milk and oatmeal for the food supplementation programs. CARE is also providing funds for the construction of the milk-oatmeal processing plant. The Government of the United States of America, through AID, and other Governments, as well as other external assistance agencies, are also collaborating in specified programs.

ECUADOR
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	1,105,514	73.4	687,430	71.9	698,602	70.7
SERVICES TO INDIVIDUALS	808,617	53.6	560,800	58.7	559,462	56.6
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	142,100	9.4	152,435	15.9	166,020	16.8
0200 MALARIA	-	-	-	-	-	-
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	416,517	27.6	408,365	42.8	393,442	39.8
1400 NUTRITION	250,000	16.6	-	-	-	-
ENVIRONMENTAL HEALTH SERVICES	268,897	17.9	96,530	10.1	106,740	10.8
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	50,700	3.4	50,700	5.3	58,680	5.9
2100 WATER SUPPLY AND EXCRETA DISPOSAL	6,067	.4	-	-	-	-
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	168,500	11.2	-	-	-	-
3200 FOOT-AND-MOUTH DISEASE	43,630	2.9	45,830	4.8	48,060	4.9
COMPLEMENTARY SERVICES	28,000	1.9	30,100	3.1	32,400	3.3
4100 NURSING	28,000	1.9	30,100	3.1	32,400	3.3
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	398,302	26.6	268,860	28.1	290,525	29.3
HEALTH SYSTEMS	327,187	21.8	217,160	22.7	234,825	23.7
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	102,790	6.8	114,050	11.9	120,100	12.1
5100 GENERAL PUBLIC HEALTH SYSTEMS	147,300	9.8	60,910	6.4	69,025	7.0
5200 MEDICAL CARE SYSTEMS	12,897	.9	-	-	-	-
5300 PLANNING	41,850	2.8	42,200	4.4	45,700	4.6
5400 STATISTICS AND INFORMATION SYSTEMS	22,350	1.5	-	-	-	-
DEVELOPMENT OF HUMAN RESOURCES	71,115	4.8	51,700	5.4	55,700	5.6
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	33,500	2.2	48,700	5.1	52,700	5.3
6300 NURSING	35,615	2.4	1,000	.1	1,000	.1
6400 ENVIRONMENTAL SCIENCES	1,000	.1	1,000	.1	1,000	.1
6600 DENTISTRY	1,000	.1	1,000	.1	1,000	.1
GRAND TOTAL =====	1,503,816	100.0	956,290	100.0	989,127	100.0

*LESS THAN .05 PERCENT

ECUADOR
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS				
	\$				\$		\$	\$	\$	\$	\$
1977											
PAHO---PR	238,245	72	-	-	209,280	11,655	3	2,310	9,000	6,000	-
PW	6,067	-	-	-	-	-	2	1,067	1,000	-	-
PG	43,872	-	-	10	34,964	4,008	-	-	-	-	4,000
WHO---WR	332,900	78	24	1	231,490	9,200	14	10,780	26,730	5,700	49,000
UNDP	518,500	57	-	5	235,650	15,000	29	22,500	-	240,000	5,350
UNFPA	364,232	-	12	2	9,900	-	34	26,555	60,180	200,835	66,762
TOTAL	1,503,816	207	36	18	721,284	39,863	82	63,212	96,910	452,535	130,012
PCT. OF TOTAL	100.0				48.0	2.7		4.2	6.4	30.1	8.6
1978											
PAHO---PR	209,315	60	-	-	185,505	11,155	3	2,655	4,000	6,000	-
WHO---WR	388,440	84	24	1	287,600	11,000	14	12,390	23,000	3,000	51,450
UNFPA	358,535	-	12	4	18,540	-	20	17,958	52,170	205,435	64,432
TOTAL	956,290	144	36	5	491,645	22,155	37	33,003	79,170	214,435	115,882
PCT. OF TOTAL	100.0				51.4	2.3		3.5	8.3	22.4	12.1
1979											
PAHO---PR	220,710	60	-	-	195,495	11,155	3	3,060	5,000	6,000	-
WHO---WR	428,440	84	24	2	314,440	11,500	25	25,500	20,000	3,000	54,000
UNFPA	339,977	-	-	2	7,500	-	15	15,000	34,570	226,745	56,162
TOTAL	989,127	144	24	4	517,435	22,655	43	43,560	59,570	235,745	110,162
PCT. OF TOTAL	100.0				52.3	2.3		4.4	6.0	23.9	11.1
PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION											
PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS											

ECUADOR
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA IV CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA IV (PR)	<u>Program Planning and General Activities</u>			90	61,260	90	64,875	90	67,960
	Area Representative	0.0294	D-1						
AMRO-1440 (WR)	<u>Nutrition</u>			90	12,875	100	15,335	90	15,145
	Medical Officer	4.0877	P-4						
AMRO-2940 (PR)	<u>Regional Development</u>			90	14,665	80	13,950	80	14,780
	Sanitary Engineer	0.4266	P-5						
AMRO-3140 (WR)	<u>Animal Health and Veterinary Public Health</u>			80	8,005	70	10,755	75	12,575
	Veterinarian	4.3088	P-4						
AMRO-4140 (PR)	<u>Nursing</u>			60	9,335	60	10,010	60	10,600
	Nurse	0.0893	P-4						
AMRO-4240 (PR)	<u>Laboratories</u>			85	12,430	85	13,200	90	14,715
	Laboratory Adviser	0.4383	P-5						
AMRO-4340 (PR)	<u>Epidemiological Surveillance</u>			60	9,910	60	10,110	60	10,820
	Epidemiologist	0.2028	P-5						
AMRO-6040 (PR/WR)	<u>Development of Human Resources</u>			130	19,705	150	20,900	160	22,080
	Medical Educator	0.3401	P-5						
	Nurse Educator	4.4046	P-4						
	Total All Programs			685	148,185	695	159,135	705	168,675

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ECUADOR - DETAIL

ECUADOR-0100, DISEASE PREVENTION AND CONTROL

The purposes of this project are to reduce morbidity and mortality due to communicable diseases, to eradicate these diseases when possible, and to maintain surveillance of those diseases already eradicated. In order to reach these objectives, medium-term goals have been established that include activities for developing and improving the health infrastructure with emphasis on the organization of information systems and epidemiological surveillance; updating technical standards; designing easily implemented methods of diagnosis; planning control, surveillance and eradication programs; developing activities for evaluation; expanding existing laboratories and establishing new ones; and developing research and personnel training. PAHO/WHO is providing technical advice on programming, organization and evaluation of activities related to this project that, in the near future, will unify all activities related to health promotion and protection.

TOTAL		48	48	48	TOTAL		142,100	152,435	166,020
P-4 EPIDEMIOLOGIST	WR	12	12	12					
4.2130									
P-2 SANITARIAN	PR	24	24	24	SUBTOTAL	PR	64,240	67,480	70,780
.0460 .4403									
P-1 SANITARIAN	WR	12	12	12	PERSONNEL-POSTS		57,240	60,480	63,780
4.3905					DUTY TRAVEL		3,000	3,000	3,000
					SUPPLIES AND EQUIPMENT		4,000	4,000	4,000
TOTAL		3	3	7	SUBTOTAL	WR	77,860	84,955	95,240
FELLOWSHIP MONTHS	WR	3	3	7					
					PERSONNEL-POSTS		67,000	72,300	78,100
					DUTY TRAVEL		3,000	3,000	3,000
					SEMINAR COSTS		3,000	3,000	3,000
					FELLOWSHIPS		2,310	2,655	7,140
					COURSE COSTS		2,550	4,000	4,000

ECUADOR-1300, MATERNITY-CENTERED FAMILY PLANNING PROGRAM

The purpose of this project is to help raise the level of family health while reducing maternal and child risks through the expansion of family health services coverage. In the short term, the project will contribute to the development of the health services infrastructure, to the expansion of educational and social information activities, and to the training of human resources at the professional, technical and community levels.

TOTAL		24	24	12	TOTAL		416,517	408,365	393,442
P-4 MEDICAL OFFICER	PR	12	12	12					
.3366					SUBTOTAL	PR	52,285	49,830	53,465
G-5 SECRETARY	UNFPA	12	12	-					
4.4785					PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		1,500	1,500	1,500
TOTAL		2	4	2	SEMINAR COSTS		3,000	2,000	2,000
CONSULTANT MONTHS	UNFPA	2	4	2	FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		6,000	2,000	3,000
TOTAL		37	23	18	SUBTOTAL	UNFPA	364,232	358,535	339,977
FELLOWSHIP MONTHS	PR	3	3	3					
FELLOWSHIP MONTHS	UNFPA	34	20	15	PERSONNEL-POSTS		5,400	5,040	-
					PERSONNEL-CONSULTANTS		4,500	13,500	7,500
					CONTRACTUAL SERVICES		31,760	31,760	31,760
					SEMINAR COSTS		8,110	-	-
					SUPPLIES AND EQUIPMENT		200,835	205,435	226,745
					FELLOWSHIPS		26,555	17,958	15,000
					MISCELLANEOUS COSTS		4,000	4,000	4,000
					COURSE COSTS		52,070	52,170	34,570
					LOCAL PERSONNEL COSTS		31,002	28,672	20,402

ECUADOR-1402, MOTHER AND CHILD FOOD PROGRAM

Studies made by the Institute of Nutrition indicate that the estimated availability of calories and protein in 1968 was 2,078 calories and 48 grams of total protein, of which 20 grams were of animal origin. The diet is low in calories, protein and fats and deficient in vitamin A, thiamin, riboflavin and calcium. Some degree of protein-calorie malnutrition is seen in 40% of all preschool age children.

The fundamental purpose of this project is to promote the industrialization of low-cost nonconventional foodstuffs of high nutritional value, which will make it possible to improve the nutritional status of the most vulnerable groups; to distribute them through the health services; and to provide mothers with nutrition education.

TOTAL		3	-	-	TOTAL		UNDP 250,000	-	-
CONSULTANT MONTHS	UNDP	3	-	-					
					PERSONNEL-CONSULTANTS		9,750	-	-
					SUPPLIES AND EQUIPMENT		240,000	-	-
					MISCELLANEOUS COSTS		250	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

ECUADOR-2000, ENVIRONMENTAL SANITATION

The purpose of this project is to cooperate with national health authorities in improving the environmental conditions of the communities. It is expected that, by the end of 1977, 64% of the urban population will receive services through connections with the drinking water network; that 56% will be connected to the sewerage network; that the new drainage systems will receive some treatment; and that some 10 urban localities will have improved systems for the collection and disposal of solid wastes. Attempts will be made to strengthen rural basic sanitation programs by increasing budgetary resources. Cooperation will also be provided in the study of air pollution problems and in the establishment of a stable administrative structure for rational water management.

TOTAL		12	12	12	TOTAL	WR	50,700	50,700	58,680
P-4 SANITARY ENGINEER 4.0451	WR	12	12	12	PERSONNEL-POSTS		39,000	42,200	45,700
					PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					DUTY TRAVEL		1,000	1,500	1,500
TOTAL		1	1	1	FELLOWSHIPS		-	-	4,080
					COURSE COSTS		8,000	4,000	4,000
CONSULTANT MONTHS	WR	1	1	1					
TOTAL		-	-	4					
FELLOWSHIP MONTHS	WR	-	-	4					

ECUADOR-2103, INSTITUTIONAL DEVELOPMENT (IEOS)

The Instituto Ecuatoriano de Obras Sanitarias (IEOS) is carrying out a construction program of drinking water supply and sewerage works financed by a loan from IDB and national and local funds. The loan also finances a technical assistance agreement to promote manpower development. IEOS, in collaboration with PAHO/WHO and in order to meet the demand of the programs for which it is responsible, is conducting a manpower development program through courses and fellowships.

TOTAL		2	-	-	TOTAL	PW	4,067	-	-
FELLOWSHIP MONTHS	PW	2	-	-	CONTRACTUAL SERVICES		4,000	-	-
					FELLOWSHIPS		1,067	-	-
					COURSE COSTS		1,000	-	-

ECUADOR-3101, NATIONAL VETERINARY LABORATORIES

The purpose of this project is the development and expansion of the national veterinary laboratories of Ecuador. Its objectives are to train personnel at both the professional and the auxiliary levels, in the country and abroad; to improve physical conditions and equipment; to increase production, control of biological products, research, diagnosis, and support for the health programs of the Ministries of Public Health and of Agriculture and Stockraising; to strengthen the operational part and to incorporate new techniques and methods with the advisory services of foreign specialists.

TOTAL		33	-	-	TOTAL	UNDP	168,500	-	-
P-4 EPIDEMIOLOGIST 4.3977	UNDP	11	-	-	PERSONNEL-POSTS		128,700	-	-
P-4 PARASITOLOGIST 4.3980	UNDP	11	-	-	PERSONNEL-CONSULTANTS		7,800	-	-
P-4 VETERINARIAN 4.3979	UNDP	11	-	-	DUTY TRAVEL		6,000	-	-
					FELLOWSHIPS		22,500	-	-
					MISCELLANEOUS COSTS		3,500	-	-
TOTAL		2	-	-					
CONSULTANT MONTHS	UNDP	2	-	-					
TOTAL		29	-	-					
FELLOWSHIP MONTHS	UNDP	29	-	-					

ECUADOR-3200, FOOT-AND-MOUTH DISEASE CONTROL

Through this project Ecuador hopes to reduce the morbidity and mortality caused by foot-and-mouth disease to 9 per 10,000 and 2 per 100,000 population respectively, through field and laboratory activities which will as far as possible prevent the disease from arising and avoid its dissemination, reduce the susceptible population, and provide the necessary sanitary facilities for combating the disease. It is hoped that these control activities will be on a national scale within four years through the reinforcement of the animal health infrastructure with permanent veterinary services and the establishment of appropriate coordination between the Ministry of Health and the Ministry of Agriculture and Stockraising.

TOTAL		12	12	12	TOTAL	PR	43,830	45,830	48,660
P-4 COUNTRY CONSULTANT 4.3593	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		4,155	4,155	4,155

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

ECUADOR-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The Government is engaged in accelerating the development of a program for a health services infrastructure, with emphasis on the renewal of obsolete structures and on the construction of new establishments for achieving the expansion of coverage, as well as on the development of an extensive manpower training program and the modernization of the administrative subsystem for the entire health system.

The purpose of this project is to achieve the consolidation of the country's health system so that health services will be accessible to the entire population, at the same time improving the quality of health care. Hopefully this will make it possible to efficiently carry out the actions planned for priority problem areas, to reduce general morbidity and mortality, and to increase life expectancy at birth.

TOTAL		36	36	36	TOTAL	WR	100,790	110,050	117,040
P-5 PAHO/WHO REPRESENTATIVE	WR	12	12	12	PERSONNEL-POSTS		49,290	55,600	60,040
4.0450					DUTY TRAVEL		2,500	3,000	3,000
G-7 ADMINISTRATIVE ASSISTANT	WR	12	12	12	COMMON SERVICES		49,000	51,450	54,000
4.4714									
G-6 SECRETARY	WR	12	12	12					
4.4161									

ECUADOR-5100, DEVELOPMENT OF HEALTH SERVICES

The Ministry of Public Health is initiating activities to increase the coverage of its services for the urban population, as well as for the inhabitants of small rural communities. Through this project, cooperation is being provided in implementing the new health system and in organizing its services. Expansion of the information system will continue, as well as improvement of the administrative infrastructure, in order to obtain efficient operation of all health services.

TOTAL		30	36	36	TOTAL		108,525	133,210	147,125
P-4 HEALTH PLANNER	WR	6	12	12					
4.3489					SUBTOTAL	PR	41,475	44,175	46,405
P-4 MEDICAL OFFICER	PR	12	12	12					
4.4614					PERSONNEL-POSTS		39,475	41,675	43,905
P-3 NURSE	WR	12	12	12	DUTY TRAVEL		2,000	2,500	2,500
4.0452									
TOTAL		-	-	1	SUBTOTAL	WR	67,050	89,035	100,720
CONSULTANT MONTHS	WR	-	-	1	PERSONNEL-POSTS		47,500	72,300	78,100
TOTAL		11	11	11	PERSONNEL-CONSULTANTS		-	-	3,400
FELLOWSHIP MONTHS	WR	11	11	11	DUTY TRAVEL		1,500	2,000	2,000
					SEMINAR COSTS		1,000	1,000	1,000
					SUPPLIES AND EQUIPMENT		2,400	-	-
					FELLOWSHIPS		8,470	9,735	11,220
					COURSE COSTS		6,180	4,000	5,000

ECUADOR-5101, STRENGTHENING OF THE HEALTH SECTOR

The needs of the health services are constantly increasing; this is due, among other things, to the natural increase in, and the rise in the educational level of, the population that is beginning to understand the significance of health and the desirability of using the resources available to it.

The purposes of this project are to expand and improve the process of health planning; to extend health services to the deprived population and to improve their quality and coverage; to strengthen the administrative structure; and to develop an information, evaluation and decision-making control system through contributions from the Government and an IDB loan.

TOTAL		24	-	-	TOTAL	UNDP	100,000	-	-
P-4 HEALTH PLANNER	UNDP	6	-	-	PERSONNEL-POSTS		89,400	-	-
4.3489					DUTY TRAVEL		9,000	-	-
P-4 MEDICAL OFFICER	UNDP	12	-	-	MISCELLANEOUS COSTS		1,600	-	-
4.4077									
P-3 STATISTICIAN	UNDP	6	-	-					
4.4078									

ECUADOR-5102, MODERNIZATION OF RURAL LIFE

The purpose of this project is to cooperate with the Government in carrying out the technical assistance program for the execution of the National Rural Health Plan designed to expand rural health services, as provided for in the Ten-Year Health Plan for the Americas.

Its aims are to extend service coverage to the underserved population, through Government investments and community participation; strengthen the sector through coordination agreements with private and public institutions working in rural areas; undertake applied research for the solution of the problem of dispersion of the rural population; coordinate the activities of the program and the training of medical and paramedical health personnel; and promote the participation of the University in the follow-up of personnel working in rural areas.

TOTAL		6	-	-	TOTAL	PG	30,975	-	-
CONSULTANT MONTHS	PG	6	-	-	PERSONNEL-CONSULTANTS		22,067	-	-
					DUTY TRAVEL		4,000	-	-
					PROGRAM SUPPORT COSTS		4,900	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

ECUADOR-5201, PLANNING AND EQUIPPING OF HOSPITALS AND OTHER HEALTH FACILITIES

The purposes of this project are to develop the infrastructure of the health and medical care services; to equip eight hospitals of the Ministry of Public Health using the following methodology: establish the equipment program; designate multi-disciplinary working groups composed of local officials, with advisory services from PAHO/WHO at the central and local level; study the communities to be provided with health and medical care services; undertake medico-architectural programs; determine the need for equipment, prepare the specifications and draw up a generic list that will enable the Ministry of Public Health to call for bids and acquire equipment; assist in the organization of the receipt, installation and calibration of the equipment and ensure that it is in working condition; identify personnel requirements and plan the training of the staff of these hospitals.

TOTAL		4	-	-	TOTAL	PG	12,897	-	-
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CONSULTANT MONTHS	PG	4	-	-	PERSONNEL-CONSULTANTS		12,897	-	-

ECUADOR-6000, DEVELOPMENT OF HUMAN RESOURCES

The Government is concerned with improving health education systems according to the plans and goals for coverage and the quality of services provided for the urban and rural populations. In order to achieve this goal, a national policy for manpower training must be established which is integrated into the country's general health plan. Decisions concerning this aspect must be based on the general health planning policy; different health disciplines must be integrated into an organized system flexible enough to allow personnel training to be updated; students must be provided with comprehensive guidance on the diversity of careers in the health sciences, thus avoiding the tendency towards limitation to traditional careers; community and preventive medicine must be emphasized, and a clear definition of the functions of each category and level of health personnel must be established.

The purpose of this project is to develop coordinated, complete program activities that assure the best possible fulfillment of the functions of health manpower education and research in health sciences.

TOTAL		12	12	12	TOTAL	WR	33,500	48,700	52,700
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P-4 HEALTH MANPOWER OFFICER 4.4615	WR	12	12	12	PERSONNEL-POSTS		26,000	42,200	45,700
					DUTY TRAVEL		1,200	1,500	2,000
					SEMINAR COSTS		4,000	3,000	3,000
					SUPPLIES AND EQUIPMENT		2,300	2,000	2,000

ECUADOR-6300, NURSING EDUCATION

There is an extreme shortage of nursing personnel in the country, which points to the urgent need for increasing their numbers at all levels in order to meet standards of minimum coverage.

The purpose of this project is to assist schools for nurses and auxiliaries in strengthening their technical and administrative structures, reviewing and updating their programs of study, increasing their budgets, training the teaching staff, improving systems of supervision and evaluation, and reinforcing the mechanisms of coordination between training and service personnel.

TOTAL		12	-	-	TOTAL	PR	35,615	1,000	1,000
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P-3 NURSE EDUCATOR .3992	PR	12	-	-	PERSONNEL-POSTS		33,615	-	-
					DUTY TRAVEL		1,000	-	-
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,000

ECUADOR-6400, SANITARY ENGINEERING EDUCATION

The objective of this project is to strengthen sanitary engineering education at the professional and intermediate levels. In view of the shortage of specialized personnel, civil engineers specialized in sanitary engineering and environmental sanitation are needed. Emphasis will be given to short courses and to the training of health inspectors and middle-level sanitary engineering personnel.

TOTAL		1,000	1,000	1,000
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SUPPLIES AND EQUIPMENT		1,000	1,000	1,000

ECUADOR-6500, VETERINARY MEDICINE EDUCATION

The country needs sufficient veterinarians to meet the technological demand and to increase food production, and thus satisfy the nutrition needs of the population.

The purposes of the project are to train professional personnel capable of promoting animal and human health; to reduce, control and eradicate foot-and-mouth disease and the zoonoses of major socioeconomic importance; and to update the contents and methods of education at the undergraduate and graduate levels in order to train the professionals the country needs.

TOTAL		-	-	3	TOTAL	WR	2,000	4,000	3,060
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FELLOWSHIP MONTHS	WR	-	-	3	FELLOWSHIPS		-	-	3,060
					COURSE COSTS		2,000	4,000	-

FUND 1977 1978 1979

FUND 1977 1978 1979

 \$ \$ \$

ECUADOR-6600, DENTAL EDUCATION

The dental manpower available is insufficient to meet the needs of the country and is unevenly distributed, and professional practice is aimed at corrective rather than preventive activities. The type of dental manpower to be trained has not yet been defined.

The purpose of this project is to adapt the training of the various human resources to the needs of the country at the undergraduate, graduate and continuing educational levels, on the basis of a study of the national situation, revision of the current orientation towards intramural work, and regionalization of dental teaching and care activities.

TOTAL	WR	1,000	1,000	1,000
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SUPPLIES AND EQUIPMENT		1,000	1,000	1,000

EL SALVADOR

The country is divided into 14 departments, 39 districts, 261 municipalities and 1,966 cantons. It covers an area of 21,040.70 km² and its estimated population at 1 July 1976 was 4,217,729 (39.5% urban and 60.5% rural). It is therefore one of the most densely populated countries in the world (200 inhabitants per km²). 46.4% of its inhabitants are under 15 years of age; 50.1% in the age group 15-64 years and 3.5% in the age group 65 years and older. The birth rate is 39.3 per 1,000 population and the natural increase exceeds 30 per 1,000 population. The general mortality rate, 7.5 per 1,000 population, continues its downward trend.

Among the principal determinants of the health level are the following: the high proportion of the population in the age group under 15 (46%); the under-five age group represents 19% of the total population; approximately three out of every five children under five years of age suffer from some degree of malnutrition; only 40% of the population of the urban area have direct water service and only 21% of the rural population have indirect access to water through rural water systems or wells; the water quality is unsatisfactory; approximately three-fifths of the population do not have sewer service; in the rural area, one out of four inhabitants has individual latrines; approximately 1,500,000 inhabitants have no excreta disposal facilities; there is a great shortage of housing; among the urban population, overcrowding is common; about 60% of the population falls into the category of scattered population and is engaged in seasonal agricultural migrant works; access to health services is limited; the illiteracy rate is high, approximately 68% in the rural areas; there is little participation of the community in the solution of its health problems; the per capita income is low and unevenly distributed; the illegitimacy rate is high.

In 1975 the health level and structure were as follows: general mortality rate, 7.5 per 1,000 population; child mortality rate, 58.2 per 1,000 live births; mortality in children under five years of age, 38.5%; deaths due to communicable diseases, 18.6%; percentage of deaths with physician attendance, 30; under-registration of deaths is high, primarily in the rural area and among children under one year of age; birth rate, 39.3 per 1,000 population; maternal mortality rate, 0.9 per 1,000 live births; the 10 leading causes of death include infectious and parasitic diseases, enteric diseases and other diarrheal diseases; there has been a decline in diseases that can be prevented by immunization and in tuberculosis; typhoid fever, intestinal parasitic diseases, infectious hepatitis and malaria have increased; hospitalization for pregnancy, childbirth and complications has increased; all grades of malnutrition continue to be a major problem in the population under five years of age.

The health policy set forth in the Development Plan 1973-1977 provides for a reduction in the imbalance between man and his environment; the organization of a national health system; an increase in the coverage of services, priority attention being assigned to the inhabitants of rural areas; an increase in the productivity of the present institutional resources; health promotion with emphasis on health education in order to obtain greater community participation; health protection through basic sanitation, vaccination programs and improvement of nutrition; and extension of social security programs.

After having been almost completely brought under control, malaria flared up. Approximately 85% of the territory is in the malarious area; however, despite the efforts made by the Government, only 32% of the area is covered, although it is hoped to increase this area with new resources. The strategies used to interrupt the malaria transmission cycle had to be changed as vector resistance to insecticides was discovered. Malaria control activities have been revised and more adequate techniques adopted to deal with the problem. In 1975 a total of 77,983 houses was sprayed; 39,233 radical treatments were administered; and 579,273 slides were examined. In addition, in the principal problem areas along the coast (rivers and inlets), engineering procedures and methods have been adopted to prevent and destroy mosquito breeding places (larvae control).

In 1975 a total of 7,400 patients with respiratory symptoms were investigated for tuberculosis. Direct sputum examinations led to the detection of 765 positives (10.3% positivity rate). In addition, 39 training courses were given at different levels and 150 inspections were carried out in dispensaries and health units that have laboratory facilities.

The population explosion in the country is a matter of grave concern. Accordingly, a family planning program is being carried out to enable every Salvadorian family to exercise the right to use procedures enabling it to have the number of children it desires at the time which is most convenient to it and according to the possibilities it has for giving them the education and care to which every human being is entitled.

In 1975 a total of 46,393 infants under one year of age were covered by the infant subprogram which is part of the maternal and child health and family planning program; the total number of medical consultations and nurse examinations provided amounted to 186,252; the maternal subprogram covered 47,517 pregnant women, who received 144,611 consultations, and 49,580 mothers received maternity care in health institutions. The family planning program covered 33,167 women and 127 men; consultations totaled 220,438.

Nutrition activities are very limited and are primarily directed towards the definition of a nutrition policy. In 1975, two training courses were held for the personnel responsible for food and dietetic services in hospitals and health centers (dietitians' assistants, administrators and stewards), and were attended by 25 persons. Standards for ambulatory care of children with Grades II and III malnutrition but without complications were approved for two establishments in the western region; at present they are being tested in three establishments in the central and metropolitan regions. A start was made on the preparation of a manual of standards and procedures for food and nutrition services. In cooperation with INCAP, a work schedule has been prepared for a study of vitamin A serum levels in the population.

The activities of dental health programs are coordinated with those of other programs, such as maternal and child health and family planning, and are designed to provide pregnant women with dental care. Large-scale activities for the application of fluorides were carried out in close collaboration with school teachers throughout the country.

Despite the progress made, problems of basic sanitation still persist because of the low level of coverage of the environmental sanitation services, especially in the rural areas. Some problems caused by economic and social development have worsened, especially the pollution of watercourses. In addition, it is necessary to upgrade the agencies and personnel responsible for dealing with environmental problems.

According to the available data (1974), out of 261 urban centers (chief towns or municipalities), 212 have water services and 72 sewerage services. 30% of the urban population have inhouse water service and 38% are connected to the sewerage system. All water supply sources are subsoil sources and there are no sewage treatment plants. The low percentage of the population with water and sewerage service is reflected in the high incidence of infectious and parasitic diseases, and the result is that gastrointestinal diseases are the leading cause of death in children under five years of age. The urban and industrial development of the country is also affected by the low coverage of these basic sanitation services, especially in the metropolitan area of San Salvador and other large cities in the country.

Urbanization in El Salvador is constantly increasing and is accompanied by an increase in the number of automobiles for passenger and freight service and private vehicles, in addition to the installation of new manufacturing industries. The data collected by the air sampling stations that are part of the Pan American Standardized Air Sampling Network indicate increases in the values of sedimentable dust and dust in suspension that exceeds the reference levels accepted for Latin America.

In the period 1973-1975, the construction of 200 water supply systems has benefited 110,000 persons. The installation of 17,991 latrines benefited 107,946 persons, especially in the rural area.

Despite the efforts made, there is a continuing shortage of nursing personnel. Nursing activities are primarily directed towards training and preparation of standards, manuals and family planning programs for lay midwives, nurses and nursing aides.

The epidemiology program is responsible for surveillance and protection against measles, diphtheria, tetanus, whooping cough, poliomyelitis and tuberculosis. A special program is being conducted for the control of diarrheal diseases, which continue to rank first as a cause of sickness and death. Closely connected with the foregoing problem is that of intestinal parasitic diseases in children, and the Division of Epidemiology has therefore planned and initiated a program for the worming of school children in the first three grades, which will cover 500,000 children. The elimination of intestinal parasites indirectly helps to improve the nutrition of the child population.

Health education activities include standardization, supervision, coordination, training, information and advisory services for the various programs of the Ministry of Public Health.

As a strategy for the development of the infrastructure and the achievement of its objectives, the Ministry of Health is increasing the coverage of its programs through the construction, equipping and operation of new health establishments, the provision of water systems, and the execution of basic sanitation works as a concept of comprehensive medicine.

Special mention must be made of the activities of the National Health Committee, which has succeeded in improving the coordination of the government institutions of the health sector and in carrying out institutional studies such as those on the Instituto Salvadoreño de Seguro Social (ISSS) and the Instituto Salvadoreño de Rehabilitación de Inválidos and the evaluation of the Five-Year Health Plan 1973-1977 preparatory to the formulation of a new Five-Year Plan for the health sector as a whole for the years 1978-1982. Joint activities are being conducted by the Ministry of Public Health and Social Welfare and the ISSS for the purpose of extending the coverage of health services in accordance with the sectoral policy. The investment budget increased from \$3.0 million in 1973 to \$13.5 million in 1975.

The direct investment program was aimed primarily at the expansion of the pertinent infrastructure in order to expand the network of health services and, as a result, care was provided to 3,476,755 persons in 1970-1975.

The health units increased from 64 in 1971 to 70 in 1975. The largest increase was in health posts in small communities, which rose from 93 in 1971 to 114 in 1975. The ISSS expanded its service network by constructing five peripheral medical units in the metropolitan region, one unit in the city of Santa Ana, and the others in the interior of the country.

The population benefiting from health services provided by the social security system amounted to 176,972 insured persons or 13.45% of the economically active population. If all beneficiaries are included, the number is 238,386, or 5.62% of the total population of the country. A total of 731,012 persons, including insured persons and dependents, or 17.23% of the total population, is covered by the pension scheme.

The amount and quality of activities under the medical care program have increased as a result of the construction of new health establishments and the remodeling and expansion of old hospitals. In this regard, special mention must be made of the construction of the emergency unit of the Rosales Hospital, which has modern facilities and specially trained personnel. The result has been prompt treatment of medico-surgical emergencies in the capital of the country and an increase in the number of patients treated.

The policy designed to give greater emphasis to preventive medicine, especially outpatient consultations, without neglecting curative medicine in order to make better use of the existing infrastructure, was implemented as follows: in 1975 the coverage in outpatient departments was 27.7%. There was a gradual decline both in the number of consultations and in their concentration. In the area of curative medicine, the number of hospital discharges increased from 182,234 in 1973 to 189,490. Conversely, the number of beds fell from 1.9 in 1973 to 1.7 per 1,000 population. This is explained by the changes in hospitalization standards for tuberculosis since ambulatory treatment was increased. The ISSS increased the number of its consultations from 4,697,568 in 1973 to 6,805,469 in 1975. The number of discharges in 1973 was 26,558 and 32,322 in 1975. Consequently, this policy was implemented in part in the sector. One of the most important reasons for failure to implement it fully was the shortage of physicians in social service. Another procedure used to increase the coverage of health programs was the conduct of activities aimed at population groups, such as the maintenance of the protection of the child population exposed to communicable diseases through immunization; fluoride applications to prevent dental caries in school children; control of intestinal parasites in children in the first three classes in urban and rural schools; increased malaria control activities; and the control of diarrheal diseases in children under five years of age.

As the health system expands its coverage and adopts new strategies to extend its activities to all Salvadorian citizens, the need is being felt to improve health statistics and to speed up the procedures for producing the necessary information when it is required and with the desired degree of reliability. The manpower required needs appropriate training, and during the current year a course for statistical and medical records auxiliaries has been designed; facilities for the preparation of middle-level statisticians are expected to be available in the coming year.

Decentralization of the health services to the most underserved areas, especially rural areas and shantytowns, was achieved through the construction in the period of 17 health posts; as a result, the coverage of the rural population, especially in the eastern and paracentral regions, has been increased.

The policy to regionalize the services and to decentralize the administration of health services to the regions, according to the programs to be conducted, was not implemented. The Ministry has completed the necessary studies for the reorganization of its administrative services, and in 1976 systems for the various administrative areas considered to be priorities were designed. The implementation of those systems will begin in February 1977.

A new type of health worker, the rural aide, is being trained to deliver health services to the most underserved areas of the country. The rural aide will provide health education and, in addition, primary health care as well as vaccinations and anti-parasitic treatments.

Regular and training courses have been conducted as follows: regular courses: 109 nurses, 146 nursing auxiliaries and 25 sanitary inspectors were graduated, making a total of 280 graduates. In the training courses, which totalled 32 and where 656 persons participated, special mention should be made to 9 short training courses in family planning for auxiliary personnel of health and for social workers, and 1 course for regular program educators on auxiliary nursing.

A total of \$1,792,000 has been invested in works for the maintenance, expansion and improvement of health buildings and establishments. Among the activities of this program, special mention must be made of the improvement and relocation of the Psychiatric Hospital (Soyapango) and the construction of the Emergency Unit of the Rosales Hospital.

EL SALVADOR
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	90,500	21.3	94,000	21.1	128,000	27.3
SERVICES TO INDIVIDUALS -----	77,700	18.2	83,000	18.7	89,300	19.1
COMMUNICABLE DISEASES -----						
0200 MALARIA	77,700	18.2	83,000	18.7	89,300	19.1
ENVIRONMENTAL HEALTH SERVICES -----	11,300	2.7	9,500	2.1	33,800	7.2
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	11,300	2.7	9,500	2.1	33,800	7.2
COMPLEMENTARY SERVICES -----	1,500	.4	1,500	.3	4,900	1.0
4300 EPIDEMIOLOGICAL SURVEILLANCE	1,500	.4	1,500	.3	4,900	1.0
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	335,505	78.7	350,725	78.9	339,305	72.7
HEALTH SYSTEMS -----	208,025	48.9	216,055	48.7	189,465	40.6
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	60,455	14.2	71,110	16.0	78,960	16.9
5100 GENERAL PUBLIC HEALTH SYSTEMS	68,620	16.1	61,595	13.9	66,600	14.3
5200 MEDICAL CARE SYSTEMS	39,475	9.3	41,675	9.4	-	-
5500 MANAGEMENT SYSTEMS	39,475	9.3	41,675	9.4	43,905	9.4
DEVELOPMENT OF HUMAN RESOURCES -----	127,480	29.8	134,670	30.2	149,840	32.1
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	127,480	29.8	134,670	30.2	149,840	32.1
GRAND TOTAL =====	426,005	100.0	444,725	100.0	467,305	100.0

*LESS THAN .05 PERCENT

EL SALVADOR
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III AMRO-5030(PR/WR)	<u>Program Planning and General Activities</u>			50	27,935	50	29,490	50	31,450
	Area Representative	0.0283	D-1						
	Seminar Costs								
AMRO-1330(PR/PG) AMRO-1331	<u>Maternal and Child Health and Family Welfare</u>			72	16,380	72	15,445	72	13,485
	Medical Officer	0.3365	P-5						
	Consultants and Seminars								
AMRO-2030(PR/WR)	<u>Environmental Health Services</u>			155	17,565	175	23,855	160	23,465
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130(PR/WR/ AMRO-3131 PG/WT) AMRO-3230	<u>Animal Health and Veterinary Public Health</u>			220	57,020	220	46,680	155	36,705
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687	P-3						
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			80	10,400	60	9,303	60	9,748
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330(PR/WR) AMRO-4331	<u>Epidemiological Surveillance</u>			30	8,035	30	8,505	95	21,910
	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			72	9,290	72	9,730	72	10,175
	Health Planner	0.2031	P-4						
AMRO-5430(PR/WR)	<u>Statistics and Information Systems</u>			72	12,270	72	13,100	72	14,045
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			50	5,435	50	5,705	50	5,975
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			72	5,700	72	9,010	72	9,695
	Health Manpower Officer	0.3627	P-4						
	<u>Total All Programs</u>			873	170,030	873	170,823	858	176,653
	=====			=====	=====	=====	=====	=====	=====

* The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

EL SALVADOR - DETAIL

EL SALVADOR-0200, MALARIA ERADICATION

The long-term objectives of this project are to eradicate malaria from the country and to adopt the necessary measures for preventing its reintroduction. The short-term goal is to apply maximum efforts in the problem areas to obtain the greatest possible reduction in the number of malaria cases by choosing attack methods that provide the greatest yield and the best results.

TOTAL		24	24	24	TOTAL	WR	77,700	83,000	89,300
P-4 MEDICAL OFFICER 4.0467	WR	12	12	12	PERSONNEL-POSTS		70,200	75,500	81,300
P-2 SANITARIAN 4.4385	WR	12	12	12	DUTY TRAVEL		2,000	2,000	2,000
					SUPPLIES AND EQUIPMENT		5,500	5,500	6,000

EL SALVADOR-2000, ENVIRONMENTAL SANITATION

The purposes of this project are to cooperate with the authorities in the integration of environmental control programs into the national development plan; to formulate plans and programs for water supply and sewerage systems, housing, solid waste control, and air, soil and waterways pollution; to execute and evaluate programs for improving environmental conditions; to promote sanitary education and community participation in environmental improvement programs; to educate and train personnel in the program's disciplines; and to develop applied research programs according to the country's needs.

TOTAL		-	-	12	TOTAL	WR	11,300	9,500	33,800
P-4 SANITARY ENGINEER 4.0478	WR	-	-	12	PERSONNEL-POSTS		-	-	31,800
					PERSONNEL-CONSULTANTS		10,800	9,000	-
					DUTY TRAVEL		-	-	500
TOTAL		4	3	-	SUPPLIES AND EQUIPMENT		500	500	1,500
CONSULTANT MONTHS	WR	4	3	-					

EL SALVADOR-4300, EPIDEMIOLOGY

The purposes of this project are to continue epidemiological surveillance of communicable diseases; to maintain the vaccination coverage already obtained with BCG, DPT, poliomyelitis and measles vaccines; and to improve the tuberculosis control program, increasing its effectiveness and coverage by integrating it into the general health services, based on bacteriological diagnosis and outpatient treatment.

TOTAL		-	-	1	TOTAL	WR	1,500	1,500	4,900
CONSULTANT MONTHS	WR	-	-	1	PERSONNEL-CONSULTANTS		-	-	3,400
					SUPPLIES AND EQUIPMENT		1,500	1,500	1,500

EL SALVADOR-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to cooperate with the Government in its efforts to raise the health status of the population by coordinating PAHO's programs with national health development policies and strategies, and to provide coordination and complementary activities in conjunction with other international technical cooperation programs for the different projects of both the Organization and the Government.

TOTAL		24	36	36	TOTAL	PR	60,455	71,110	78,960
P-5 PAHO/WHO REPRESENTATIVE .0477	PR	12	12	12	PERSONNEL-POSTS		53,455	63,835	71,360
G-7 ADMINISTRATIVE ASSISTANT .4717	PR	-	12	12	DUTY TRAVEL		1,500	1,500	1,500
G-3 CLERK .4035	PR	12	12	12	COMMON SERVICES		5,500	5,775	6,100

EL SALVADOR-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to cooperate in the program for extending health service coverage with special attention to the problems of the rural and marginal population. Possible activities also include extending social security coverage and providing for community participation in health programs.

To this end, the Government plans to encourage the development and strengthening of the national health system which will facilitate cooperation in the use of available resources in the institutions of this sector. This program will attempt to progressively structure the national health system and to define the duties and responsibilities of each institution within the system with a view to controlling and stratifying services in an overall approach to community development. The Government also plans to establish a planning system to provide for the overall development and administrative rationalization and modernization of the system's institutions; to integrate preventive and medical care activities into the health establishments on a regional level with well-defined degrees of care; to provide for inter-institutional coordination of investment plans through the planning and construction of new hospitals and health establishments as required for the operation of the system; and to provide juridical tools for sectoral and institutional reforms.

FUND					FUND				
1977 1978 1979					1977 1978 1979				
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FRENCH ANTILLES AND GUIANA

The French "departments of the overseas" (Départements d'Outre-mer), comprising French Guiana, Guadeloupe and Martinique, are part of France. Their residents are full citizens of France, and the laws of France apply. Their administration is similar to that of the departments of continental France. Most of the 700,000 population of these territories is found in Martinique and Guadeloupe. French Guiana, the former penal colony, is sparsely populated, with a mixed ethnic population of less than 50,000, made up of Negroes, Amerindians and Europeans. The French space station is located at Kourou, near Cayenne, the capital. A regional health inspector is stationed in Martinique. Health inspectors are located in Martinique, Guadeloupe and French Guiana.

Although the laws of France, including health and social legislation, apply, morbidity and mortality from communicable diseases continues to be a problem. The Pasteur Institute in Cayenne has a well developed research program in the arboviruses, and analyzes over 250,000 insect vectors annually. In addition, a collection of armadillos has been started for research into leprosy. Malaria and a high index of Aedes aegypti continue to be problems in French Guiana. Martinique and Guadeloupe are free of malaria.

Guadeloupe is presently threatened with an eruption of the volcano "Souffrière," which dominates the capital, Basse-Terre. Seventy thousand inhabitants, including those in the principal departments of Government, have been evacuated, with resulting disruption of political, economic and social life.

FRENCH ANTILLES AND GUIANA

PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	10,140	52.3	13,075	62.1	11,930	49.4
SERVICES TO INDIVIDUALS	6,440	33.2	7,900	37.5	6,830	28.3
0200 COMMUNICABLE DISEASES						
MALARIA	6,440	33.2	7,900	37.5	6,830	28.3
COMPLEMENTARY SERVICES	3,700	19.1	5,175	24.6	5,100	21.1
4200 LABORATORIES	3,700	19.1	5,175	24.6	5,100	21.1
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	9,240	47.7	7,965	37.9	12,240	50.6
HEALTH SYSTEMS	9,240	47.7	7,965	37.9	12,240	50.6
5100 GENERAL PUBLIC HEALTH SYSTEMS	9,240	47.7	7,965	37.9	12,240	50.6
GRAND TOTAL =====	19,380	100.0	21,040	100.0	24,170	100.0

*LESS THAN .05 PERCENT

FRENCH ANTILLES AND GUYANA

SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
	\$				\$		\$		\$		\$	\$
1977												
PAHO---PR	19,380	-	-	-	-	-	12	9,240	-	10,140	-	-
TOTAL	19,380	-	-	-	-	-	12	9,240	-	10,140	-	-
PCT. OF TOTAL	100.0							47.7		52.3		
1978												
PAHO---PR	21,040	-	-	1	3,000	-	9	7,965	-	10,075	-	-
TOTAL	21,040	-	-	1	3,000	-	9	7,965	-	10,075	-	-
PCT. OF TOTAL	100.0				14.3			37.8		47.9		
1979												
PAHO---PR	24,170	-	-	1	3,400	-	12	12,240	-	8,530	-	-
TOTAL	24,170	-	-	1	3,400	-	12	12,240	-	8,530	-	-
PCT. OF TOTAL	100.0				14.1			50.6		35.3		

PAHO-PR-REGULAR BUDGET						PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND						
PM-COMMUNITY WATER SUPPLY						PJ-GRANTS RELATED TO CAREC						
PA-INCAP - REGULAR BUDGET						WHO--WR-REGULAR BUDGET						
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS						UNDP-UNITED NATIONS DEVELOPMENT PROGRAM						
PG-GRANTS AND OTHER CONTRIBUTIONS						UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES						
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION						WO-GRANTS AND OTHER FUNDS						

FRENCH ANTILLES AND GULANA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			32	4,890	32	5,705	32	6,190
	Medical Officer	0.0610	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			12	2,180	12	2,310	12	2,445
	Sanitary Engineer	0.0862	P-5						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			11	1,415	11	1,515	11	1,610
	Health Planner	0.4034	P-4						
	Total All Programs			88	28,085	88	33,010	88	35,065
	=====			=====	=====	=====	=====	=====	=====

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This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

FRENCH ANTILLES AND GUIANA - DETAIL

FRENCH ANTILLES AND GUIANA-0200, MALARIA ERADICATION

The purposes of the project are to eradicate malaria from the entire country and to maintain it free of malaria. To achieve this, case detection has been intensified. Residual spraying, medicated salt and case treatment are being employed.

TOTAL	PR	6,440	7,900	6,830
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SUPPLIES AND EQUIPMENT		6,440	7,900	6,830

FRENCH ANTILLES AND GUIANA-4200, LABORATORY SERVICES

The objectives of this project are to assist in the continued isolation and research of arbovirus, assist and encourage the entomology of mosquitoes and other vectors, and continue research on leprosy vaccine.

It is hoped during the budget period to isolate virus from insects captured and assess it for virus-carrying capability; culture *B. leprae* (Hansen's B) to develop a vaccine against leprosy, and continue to foster close relationship between the Pasteur Institutes and CAREC.

TOTAL		-	1	1	TOTAL	PR	3,700	5,175	5,100
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CONSULTANT MONTHS	PR	-	1	1	PERSONNEL-CONSULTANTS		-	3,000	3,400
					SUPPLIES AND EQUIPMENT		3,700	2,175	1,700

FRENCH ANTILLES AND GUIANA-5100, FELLOWSHIPS

Under this project, professionals from French Departments will visit other areas of the Caribbean to become acquainted with their counterparts in their fields of interest.

TOTAL		12	9	12	TOTAL	PR	9,240	7,965	12,240
-----		-----	-----	-----	-----		-----	-----	-----
FELLOWSHIP MONTHS	PR	12	9	12	FELLOWSHIPS		9,240	7,965	12,240

GRENADA

Grenada, including Carriacou and Petit Martinique, covers an area of 345.66 square kilometers with a population of 97,000 (1973), giving a density of 281 persons per square kilometer. About one-third resides in the parish of St. George, which includes the capital; otherwise the population is evenly distributed throughout the island. In 1970, 46.64% of the population was under 15 years of age, and 46.5% was in the age group 15 to 64 years. Women 15-44 years of age constituted 22.6%. The population increase over the decade 1961 to 1970 was 0.6% per annum. It is estimated that 17,500 persons, mostly young, emigrated during 1961-1970. There was a steady decline in fertility and birth rates during this period. The annual rate of natural increase is now estimated at slightly under 2%. In 1972 the crude birth rate was 27.42 per 1,000 population, the crude death rate 6.9 per 1,000 population, and the infant mortality rate 16.0 per 1,000 live births.

Primary school enrollment was 99% in 1970. Per capita GNP in 1973 was US\$330. The labor force is estimated at 23,100, of which more than 20% is unemployed. Along with the expanded production of the export-oriented crops, cocoa, bananas and nutmeg, the Government encourages diversified agricultural production for domestic consumption and for the regional market: vegetables, fruits, dairy products and livestock. An Industrial Development Corporation has been established to stimulate development of small-scale industry. Growing interdependence among agriculture, industry and tourism will create job opportunities to meet the demand of a young and rapidly growing population.

Grenada became a fully independent State on 7 February 1974. Application for PAHO membership is under consideration. The Policy Advisory Committee, with the Minister of Health as Chairman, ordains the health policy of the country and defines priorities. Although there is no formal development plan, the Government has tried to achieve fairly equitable distribution of income to provide adequate educational, health and social facilities.

In addition to PAHO/WHO assistance, external aid is provided by UNDP in education, vocational skills, finance, management, water supplies, hospital maintenance, statistics, medical laboratory, sewerage, and veterinary medicine; by CIDA in water supply and the fishing industry; by the Medical Research Council of the United Kingdom in agriculture and laboratory; and by Project HOPE in hospital, laboratory and inservice training of public health inspectors. Agriculture will have a large technical input from UNDP over the next few years, aiming at self-sufficiency and economic improvement.

Medical services are available at the St. George's General Hospital, two district hospitals, and 36 medical stations, including four health centers which are easily accessible to the rural population. The progress of health services has been slow since 1974, due to shortage of personnel, transport, and supplies, including drugs, vaccine and insecticides. A senior officer from the Ministry of Health has completed training in hospital administration in the United States of America. No food supplements, except for those from the OXFAM food supplementation program, have been available over two years, and the number of children under three years of age attending child welfare clinics has been greatly reduced. A food and nutrition survey was carried out in 1972 at the village of La Poterie. A system of follow-up of malnutrition cases after discharge from hospital was initiated. Development of a national food and nutrition policy is under consideration.

Poor attendance at child welfare clinics has contributed to the low level of immunization in the population at risk. A more intensive immunization program against the common communicable diseases is planned as part of the maternal and child health program, which is being reformulated. Reorganization of the maternal and child health program, with inservice education of staff, is being planned, particularly in developing postnatal clinics.

A new system of notification of reportable diseases, which includes reporting by nurses, has been introduced. A system of medical records abstraction and collection has been established at the main hospital. A small statistical unit established at the Ministry is working in close association with CAREC. Special efforts are being made to upgrade diagnostic and treatment facilities and to develop an adequate system of hospital records. A medical pathologist has been appointed.

Rabies, enzootic in the mongoose population, with sporadic spill-over into domestic species, continues to be a threat to human life. A nationwide domestic animal rabies vaccination campaign was launched in 1976. Extension of the rabies section at the Park Veterinary Diagnostic Laboratory will allow diagnosis of some zoonotic diseases.

In 1972, 44% of the urban and 20% of the rural populations were served by house-connected water supply. Houses having easy access to water supply comprised 56% in urban areas and 80% in rural areas (1972). Twenty-nine per cent of the urban population is connected to sewerage systems; 95% of the total population is served by sewerage systems or latrines. Water development and sewage disposal programs are currently receiving much attention in certain parts of the island. Solid waste disposal is poorly developed. An engineering and financial feasibility study of a sewerage project for the Grand Anse/Morne Rouge area in south St. George's commenced in August 1973 and was completed in early 1975. Improvement of food hygiene and the processing of food substances is in need of attention.

In 1975 health personnel (with rate per 10,000 population) numbered: 31 registered medical practitioners (3.4); 4 dentists (0.4); 1 full-time pathologist (0.1); 1 veterinarian (0.1); 8 public health nurses (0.9); 32 clinical nurses (3.5); 10 public health inspectors (1.1); and 20 registered dispensers (2.2). Development of human resources, with a more equitable distribution of trained staff, is a serious problem in Grenada. Allied health personnel are in short supply and training facilities are almost nonexistent.

GRENADA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	24,270	100.0	24,045	100.0	29,240	100.0
HEALTH SYSTEMS -----	24,270	100.0	24,045	100.0	29,240	100.0
5100 GENERAL PUBLIC HEALTH SYSTEMS	24,270	100.0	24,045	100.0	29,240	100.0
GRAND TOTAL =====	24,270	100.0	24,045	100.0	29,240	100.0

*LESS THAN .05 PERCENT

GRENADA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			32	4,890	32	5,705	32	6,190
	Medical Officer	0.0610	P-4						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			64	8,595	64	9,955	64	10,655
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-1410 (WR)	<u>Nutrition</u>			30	2,450	30	3,850	30	4,185
	Medical Officer	4.0885	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			22	4,085	22	4,335	22	4,585
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			19	2,815	19	3,035	19	3,270
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			24	1,845	24	2,930	24	3,110
	Nurse	0.0887	P-4						
AMRO-4410 (PR)	<u>Health Education</u>			35	4,700	35	5,055	35	5,355
	Health Education Specialist	0.0918	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			26	3,700	26	4,005	26	4,315
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			21	2,600	21	2,785	21	2,965
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			21	2,600	21	2,785	21	2,965
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			19	3,170	19	3,395	19	3,615
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			22	2,425	22	2,610	22	2,785
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PC)	<u>Development of Human Resources - Other</u>			114	32,685	108	25,000	108	25,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	Total All Programs			482	96,160	476	98,925	476	103,815

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This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

GRENADA - DETAIL

GRENADA-5100, DEVELOPMENT OF HEALTH SERVICES

Constraints to the delivery of health services in the country are the insufficiency of nurses, health inspectors and auxiliary staff. Since many persons have left the service without replacement, quality and coverage have been affected.

TOTAL		3	3	2	TOTAL	PR	24,270	24,045	29,240
CONSULTANT MONTHS	PR	3	3	2	PERSONNEL-CONSULTANTS		8,100	9,000	6,800
TOTAL		21	17	22	FELLOWSHIPS		16,170	15,045	22,440
FELLOWSHIP MONTHS	PR	21	17	22					

GUATEMALA

The Republic of Guatemala, situated in the northern part of Central America, covers an area of 131,800 km² and is divided politically into 22 departments and 326 municipalities. The terrain is extremely rugged; it is crossed by the Cordillera de los Andes, which forms the valleys and mountain peaks that differentiate the six geo-economical regions: the west-central highlands, the eastern highlands, the southern slope, the northern foothills, the Pacific plains and the northern lowlands. Some large rivers create geographical obstacles that hamper means of communication and limit the socioeconomic integration of the country.

Guatemala has a population of 6,473,642 inhabitants. The average population density is 52.8 inhabitants per square kilometer, ranging from 617.3 for the Department of Guatemala to 1.1 in the Department of Petén. The rural population (60.47%) far exceeds the urban population (39.53%); 64% of the population lives in communities with less than 2,000 inhabitants; 78% of the main towns of the municipalities have less than 20,000 inhabitants. The population structure shows that 47.5% is under 15 years of age; life expectancy at birth is 53.2 years; and the birth rate is 39.6 per 1,000 population. The ethnic composition of the population is 43.7% Indian and 56.3% non-Indian. In general, there is widespread illiteracy; of those over 15 years of age, only 35.1% can read and write.

Approximately one-third of the total population is gainfully employed, 60% of whom work in the primary sector. In 1972 the GDP was Q2,164,100 and the average per capita income was Q353, with sharp stratification in income.

Forty per cent of the urban population have inhouse water connections and 40.2% have sewer service; in the rural areas, 13.9% of the population have water service; 15.4% of the rural and suburban population have sanitary latrines. Refuse collection ranges between 80 and 30% of the 10 largest towns. Lack of food hygiene is serious and affects all strata of the population. There are many health facilities using ionizing radiation that require improvement. The institutions responsible for the planning, design, construction, operation and maintenance of water supply, sewage disposal, drainage and other sanitary services do not always have all the necessary resources and have not all reached a sufficient level of operational development to achieve the goals of the Ten-Year Health Plan for the Americas.

The primary cause of the high mortality in the country is communicable and parasitic diseases. In this group, diseases preventable by vaccination account for 20% of the deaths in children under five years of age; enteric diseases, sexually transmitted diseases, tuberculosis, onchocercosis, Chagas' disease and leishmaniasis are the main problems.

The malarious area, all of which is in the attack phase, measures 80,350 km², i.e., 75% of the territory of the country, and contains 2,404,756 inhabitants (37.1% of the total population). The epidemiological situation is deteriorating, primarily because of vector resistance to DDT and propoxur and inadequate coverage of attack measures. Rabies is enzootic and epidemic outbreaks occur every five or six years. The epidemiological surveillance system, with the exception of that for malaria, is limited because of the lack of training of field personnel, the absence of a good laboratory network, and deficient national coverage.

In the area of maternal and child health and family welfare, the indicators point to serious problems in the departments which have the highest percentage of rural population. The birth rate is 44.1 per 1,000 population, and the fertility rate, 208.0 per 1,000 women in the age group 15-44 years; deaths in infants, mothers and the 1-4 year age group average 79.8 per 1,000 live births, 2.1 per 1,000 live births and 21.2 per 1,000 children of the same age group, respectively, for the whole country. Manifest malnutrition (Gomez grades II and III) affected 32.4% of children under five years of age in 1965, and it is believed that this percentage has not changed significantly.

Service coverage is limited, as may be seen from the fact that in 1973 only 18.5% of all births took place in hospitals and only 26% of all deaths were medically certified. The Ministry of Public Health and Social Welfare has 41 hospitals, 124 centers and 450 health posts, with a total of 9,425 beds, but these are insufficient to meet the demand for care, especially in rural communities. The Instituto Guatemalteco de Seguridad Social operates 35 establishments with approximately 12,000 beds. The bed occupancy rate in general hospitals is 102.5% and in hospitals for chronic patients, 89%; the average length of stay is 18 days in the former and 113 in the latter, which gives an idea of the saturation of the services and their low output.

There is no explicitly defined personnel policy establishing incentives to induce the health team to move to the underserved areas; the inadequate distribution of health personnel hampers the efficient conduct of medical care programs. More than 90% of the hospitals and health centers are managed by professionals who have no training in public health administration; of the chiefs of the 22 health areas into which the country is divided, only a few have been trained for the post. Of all deaths, 25.5% are certified by physicians and the remainder by civil or lay authorities; in some areas medical certification of death is less than 10%.

There is no updated and complete information about the manpower situation of the country nor is there any explicitly defined policy for establishing or maintaining a manpower inventory, ensuring its adequate distribution and utilization, and training it in accordance with national needs. The country has 1,270 physicians (2.2 per 10,000 inhabitants) and only 753 nurses (1.3 per 10,000 inhabitants); of the 2,800 nursing auxiliaries, 80% are untrained.

The National Development Plan 1971-1975 was reformulated for the period 1975-1979 and includes additions to some sectors and new objectives. The intention is to increase the growth rate of the GDP, which was 6.2% in 1972; to substantially increase the demand for goods and services; to achieve balanced social development within the context of the political structure and available resources; and to reduce the impact of external factors on the development process. The strategies for achieving these objectives include strengthening of the agricultural sector as the first priority; expansion of the manufacturing sector; increase in mining activities; development of tourism; and training and better utilization of manpower with, as part of that effort, greater concern for the education and health sectors. The health policy set forth in the 1975-1979 Plan is closely related to the broad lines of general development. It was reformulated as a result of the earthquake that occurred on 4 February 1976.

It is planned to provide more persons with environmental sanitation services at costs geared to the socioeconomic conditions in the country; to strengthen the organizational structure and improve the operating capacity of national institutions; to continue activities for the control of air, water and food contamination and those for protection against occupational hazards, including ionizing radiation; to organize a system for the epidemiological surveillance and control or eradication of the most frequent communicable and parasitic diseases; to improve current maternal and child health programs as well as information on morbidity and mortality care and resources for those groups; to increase the coverage of the services, the coordination of the agencies of the sector, and the active participation of the community; and to define a policy of manpower training and utilization in accordance with the National Health Plan by strengthening the Division of Human Resources of the Ministry of Public Health and Social Welfare and improving both the use made of the manpower available and the training of professional, technical and auxiliary personnel, especially in primary care and environmental health.

GUATEMALA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	389,080	43.9	253,880	40.3	254,655	38.0
SERVICES TO INDIVIDUALS	35,300	4.0	53,500	8.5	47,200	7.0
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	21,800	2.5	35,500	5.6	30,200	4.5
0200 MALARIA	-	-	-	-	-	-
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	13,500	1.5	18,000	2.9	17,000	2.5
ENVIRONMENTAL HEALTH SERVICES	353,780	39.9	200,380	31.8	207,455	31.0
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	58,875	6.6	62,275	9.9	62,705	9.4
3500 QUALITY CONTROL OF FOODSTUFFS	294,905	33.3	138,105	21.9	144,750	21.6
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	497,136	56.1	376,320	59.7	414,920	62.0
HEALTH SYSTEMS	195,749	22.1	154,770	24.5	178,290	26.6
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	-	-	-	-	-	-
5100 GENERAL PUBLIC HEALTH SYSTEMS	162,134	18.3	119,230	18.9	178,290	26.6
5200 MEDICAL CARE SYSTEMS	-	-	-	-	-	-
5500 MANAGEMENT SYSTEMS	33,615	3.8	35,540	5.6	-	-
DEVELOPMENT OF HUMAN RESOURCES	254,190	28.7	221,550	35.2	236,630	35.4
6200 MEDICINE	75,970	8.6	74,130	11.8	74,790	11.2
6400 ENVIRONMENTAL SCIENCES	58,510	6.6	46,895	7.4	51,340	7.7
6500 VETERINARY MEDICINE	63,900	7.2	56,630	9.0	62,560	9.3
6600 DENTISTRY	55,810	6.3	43,895	7.0	47,940	7.2
TECHNOLOGICAL RESOURCES	47,197	5.3	-	-	-	-
TEXTBOOKS AND OTHER TEACHING MATERIALS						
8400 OTHER	47,197	5.3	-	-	-	-
GRAND TOTAL =====	886,216	100.0	630,200	100.0	669,575	100.0

*LESS THAN .05 PERCENT

PAHO-PU-NATURAL DISASTER RELIEF VOLUNTARY FUND
PJ-GRANTS RELATED TO CAREC
WHO--WR-REGULAR BUDGET
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
WG-GRANTS AND OTHER FUNDS

GUATEMALA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III AMRO-5030 (PR/WR)	<u>Program Planning and General Activities</u>			60	28,060	60	29,610	60	31,565
	Area Representative	0.0283	D-1						
	Seminar Costs								
AMRO-1330 (PR/PG) AMRO-1331	<u>Maternal and Child Health and Family Welfare</u>			116	23,877	116	23,110	116	21,185
	Medical Officer	0.3365	P-5						
	Consultants and Seminars								
AMRO-2030 (PR/WR)	<u>Environmental Health Services</u>			115	14,415	115	20,100	105	16,765
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130 (PR/WR/ AMRO-3131 PG/WT) AMRO-3230	<u>Animal Health and Veterinary Public Health</u>			330	71,970	335	63,780	270	55,225
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687							
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			240	28,285	225	28,913	205	27,858
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330 (PR/WR) AMRO-4331	<u>Epidemiological Surveillance</u>			105	19,040	100	19,300	100	22,715
	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			116	13,815	116	14,525	116	15,240
	Health Planner	0.2031	P-4						
AMRO-5430 (PR/WR)	<u>Statistics and Information Systems</u>			116	18,645	116	19,980	116	21,475
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			80	8,690	80	9,105	80	9,550
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			116	8,830	116	13,965	116	14,870
	Health Manpower Officer	0.3627	P-4						
Total All Programs				1,394	235,627	1,379	242,388	1,284	236,448

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FUND 1977 1978 1979

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\$ \$ \$

GUATEMALA - DETAIL

GUATEMALA-0100, COMMUNICABLE DISEASE CONTROL

The purpose of this project is to organize and strengthen a system for epidemiological surveillance and control or eradication of the most prevalent communicable and parasitic diseases. Its specific objectives are to achieve the eradication of malaria and prevent reinfection by this disease; to maintain the vaccination coverage levels, especially in the population under five years of age, in order to reduce morbidity and mortality due to preventable diseases; to improve the tuberculosis control program by incorporating it into the general health services; to promote programs for the control of sexually transmitted diseases, Chagas' disease and others, and to undertake research on the control of onchocerciasis; to promote development of the laboratory network, with emphasis on its expansion and personnel training; to keep canine rabies under control and eventually eradicate it from the country; to eradicate human rabies and produce antirabies vaccines of proven quality; to contribute to the development of animal health programs for zoonosis control and eradication and the prevention of foot-and-mouth disease; and to train personnel in health education and social communication activities.

TOTAL		3	4	3	TOTAL	WR	21,800	35,500	30,200
CONSULTANT MONTHS	WR	3	4	3	PERSONNEL-CONSULTANTS		8,100	12,000	10,200
					SUPPLIES AND EQUIPMENT		13,700	23,500	20,000

GUATEMALA-1301, MATERNAL AND CHILD HEALTH

The objectives of this project include cooperating with the Government in identifying specific maternal and child health problems; organizing and improving current maternal and child care programs; increasing and establishing new services in the rural areas, especially health centers and health posts; training personnel, especially nursing auxiliaries and community leaders; improving information on morbidity and mortality, care and resources for the above-mentioned groups; assisting in the acquisition and use of resources coming from other sources; and coordinating programs for the prevention and control of nutritional diseases with INCAP.

TOTAL		5	6	5	TOTAL	WR	13,500	18,000	17,000
CONSULTANT MONTHS	WR	5	6	5	PERSONNEL-CONSULTANTS		13,500	18,000	17,000

GUATEMALA-2000, ENVIRONMENTAL SANITATION

The objectives of this project are to contribute to the expansion of environmental health services, ensuring that their costs are adjusted to the payment capacity of the community and to the plans and policies of the health sector; to strengthen the organizational structure and to increase the operating capacity of national sanitation institutions through measures designed to increase their resources and improve their procedures; and to continue to promote environmental control activities, as well as occupational and radiological health activities.

TOTAL		12	12	12	TOTAL	PR	58,875	62,275	62,705
P-4 SANITARY ENGINEER .0490	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					PERSONNEL-CONSULTANTS		10,800	12,000	10,200
TOTAL		4	4	3	DUTY TRAVEL		3,600	3,600	3,600
CONSULTANT MONTHS	PR	4	4	3	SUPPLIES AND EQUIPMENT		5,000	5,000	5,000

GUATEMALA-3500, UNIFIED FOOD CONTROL LABORATORY

The purpose of this laboratory is to strengthen food control activities in Guatemala in order to better protect the health of the population, to help improve food technology in industry, to protect consumers economically, to facilitate and increase intrazonal trade, and to expand the export of food products.

It is planned to provide the other Latin American countries with specialized laboratory personnel, to undertake research on analytical methods in order to standardize the systems used, and periodically to review food hygiene standards.

TOTAL		48	36	36	TOTAL		294,905	138,105	144,750
P-5 PROJECT MANAGER 4.3586	UNDP	12	-	-	SUBTOTAL	PR	131,145	138,105	144,750
P-4 LABORATORY ADVISER .4277	PR	12	12	12	PERSONNEL-POSTS		106,705	112,755	118,895
P-3 LABORATORY ADVISER .3535 .4278	PR	24	24	24	DUTY TRAVEL		500	500	500
					LOCAL PERSONNEL COSTS		23,940	24,850	25,355
					SUBTOTAL	PG	94,560	-	-
					CONTRACTUAL SERVICES		70,965	-	-
					SUPPLIES AND EQUIPMENT		12,000	-	-
					COMMON SERVICES		11,595	-	-
					SUBTOTAL	UNDP	69,200	-	-
					PERSONNEL-POSTS		48,000	-	-
					DUTY TRAVEL		1,200	-	-
					SUPPLIES AND EQUIPMENT		20,000	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

GUATEMALA-5100, DEVELOPMENT OF HEALTH SERVICES

The objectives of this project are to improve the physical structure, organization and efficiency of existing establishments; to coordinate health sector institutions; to install and organize new medical care establishments; to promote the regionalization of services and a nursing system that will make it possible to provide care in accordance with national programs; to achieve greater community participation; to educate and train professional, technical and auxiliary personnel; and to develop the health statistics system in accordance with the basic needs of the country.

TOTAL		36	36	48	TOTAL	140,445	154,770	178,290
P-5 MEDICAL OFFICER	PR	12	12	12				
.0284								
P-4 MEDICAL OFFICER	PR	-	-	12	SUBTOTAL	87,875	109,230	106,730
.4838								
P-3 ADMIN. METHODS OFFICER	PR	12	12	-	PERSONNEL-POSTS	80,675	102,030	99,530
.3675					DUTY TRAVEL	7,200	7,200	7,200
P-2 SOCIAL WORKER	WR	-	-	12	SUBTOTAL	52,570	45,540	71,560
4.4835								
G-8 ADMINISTRATIVE ASSISTANT	PR	12	12	12	PERSONNEL-POSTS	-	-	22,400
.0285					PERSONNEL-CONSULTANTS	35,100	42,000	37,400
TOTAL		13	14	11	DUTY TRAVEL	-	-	3,600
					SUPPLIES AND EQUIPMENT	9,000	-	-
CONSULTANT MONTHS	WR	13	14	11	FELLOWSHIPS	8,470	3,540	8,160
TOTAL		11	4	8				
FELLOWSHIP MONTHS	WR	11	4	8				

GUATEMALA-5101, EMERGENCY ASSISTANCE

The purpose of this project is to cooperate with the Government in its programs of recovery from the effects of the 1976 earthquake.

TOTAL	PG	49,804	-	-
SUPPLIES AND EQUIPMENT		49,804	-	-

GUATEMALA-5102, EMERGENCY ASSISTANCE FOR HEAR RABINAL

Earthquake rehabilitation assistance for the community of Rabinal, Guatemala, is provided with funds donated to PAHEF for this purpose.

TOTAL	PH	500	-	-
LOCAL COSTS		500	-	-

GUATEMALA-5103, HEALTH PROMOTION

The Ministry of Health of Guatemala has undertaken a program to train health promoters in Boca del Monte near Guatemala City. Under this project assistance with local costs is provided with funds granted to PAHEF.

TOTAL	PH	5,000	-	-
GRANTS		5,000	-	-

GUATEMALA-6200, MEDICAL EDUCATION

The objectives of this project are to assist the Government in improving the diagnosis of the manpower situation in the country; defining a manpower training and utilization policy in accordance with the National Health Plan; strengthening the Division of Human Resources of the Ministry of Public Health and Social Welfare; improving the use made of available personnel; sponsoring the training of professional, technical and auxiliary workers; coordinating training and service institutions; and supporting certain programs in the health sciences faculties.

TOTAL		4	3	3	TOTAL	75,970	74,130	74,790
CONSULTANT MONTHS	PR	4	3	3	PERSONNEL-CONSULTANTS	10,800	9,000	10,200
TOTAL		44	36	38	SEMINAR COSTS	19,500	15,000	6,830
					FELLOWSHIPS	33,880	31,860	38,760
FELLOWSHIP MONTHS	PR	44	36	38	GRANTS	8,290	8,500	9,000
					COURSE COSTS	3,500	9,770	10,000

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

GUATEMALA-6400, SANITARY ENGINEERING EDUCATION

The objective of this project is to provide specialized training for professional and auxiliary personnel in environmental health by means of a program of continuing education, centered mainly in the Escuela Regional de Ingeniería Sanitaria of the Universidad de San Carlos. This school serves all the countries of Central America and Panama, offering academic courses, short courses and research opportunities.

TOTAL		3	2	2	TOTAL	PR	58,510	46,895	51,340
CONSULTANT MONTHS	PR	3	2	2	PERSONNEL-CONSULTANTS		8,100	6,000	6,800
TOTAL		33	27	27	SEMINAR COSTS		2,000	2,000	2,000
FELLOWSHIP MONTHS	PR	33	27	27	FELLOWSHIPS		25,410	23,895	27,540
					COURSE COSTS		23,000	15,000	15,000

GUATEMALA-6500, VETERINARY MEDICINE EDUCATION

The Facultad de Medicina Veterinaria y Zootecnia of the Universidad de San Carlos is a regional school for the entire isthmus. Technical advisory services are focused on introducing methodology, design and selection of curricula based on educational objectives, and on organizing continuing education and research programs, as well as extension courses aimed at achieving the goals set out in the Ten-Year Health Plan for the Americas.

TOTAL		3	2	2	TOTAL	PR	63,900	56,630	62,560
CONSULTANT MONTHS	PR	3	2	2	PERSONNEL-CONSULTANTS		8,100	6,000	6,800
TOTAL		40	38	38	SEMINAR COSTS		2,000	2,000	2,000
FELLOWSHIP MONTHS	PR	40	38	38	FELLOWSHIPS		30,800	33,630	38,760
					COURSE COSTS		23,000	15,000	15,000

GUATEMALA-6600, DENTAL EDUCATION

The purpose of this project is to cooperate with the Faculty of Dentistry and the health services to achieve, by coordinated action, the necessary increase in the number of dentists and technical and auxiliary personnel, and to ensure that the training is adapted to the needs of the services and the development requirements of the health plans and programs laid down in the Ten-Year Health Plan for the Americas and in the resolutions adopted by the recent Meeting of Ministers of Health of Central America and Panama. With this end in view, it is proposed to formulate a policy and a rational plan for dental manpower; adjust the curriculum and study plans, with emphasis on integrated training and the early introduction of the student to productive work in the services; improve the administrative and teaching structure of the School of Dentistry; improve the scientific education and the teacher training of the professors of dentistry; and conduct scientific research.

TOTAL		2	1	1	TOTAL	PR	55,810	43,895	47,940
CONSULTANT MONTHS	PR	2	1	1	PERSONNEL-CONSULTANTS		5,400	3,000	3,400
TOTAL		33	27	27	SEMINAR COSTS		2,000	2,000	2,000
FELLOWSHIP MONTHS	PR	33	27	27	FELLOWSHIPS		25,410	23,895	27,540
					COURSE COSTS		23,000	15,000	15,000

GUATEMALA-8400, PURCHASE OF DENTAL EQUIPMENT

The purpose of this project is to cooperate in the provision of dental equipment to the Universidad de San Carlos.

TOTAL	PR	47,197	-	-
SUPPLIES AND EQUIPMENT		47,197	-	-

GUYANA

The Republic of Guyana, with a land mass of 83,000 square miles, (210,000 square kilometers), lies on the north coast of South America. It has a predominantly tropical climate and tropical vegetation. The country is traversed longitudinally by a series of rivers which have dictated transportation and communication networks and have had a significant influence on economic development and distribution of the population. Ninety-four percent of the population is located along the coast, which is below sea level, and along the regions bordering the Essequibo and Demerara Rivers. The remainder of the population is dispersed widely over the vast expanse of the interior of the country. According to the 1970 census, the population was 714,233, the estimated natural rate of increase is 2.5%, the estimated population in 1975 was 811,210, and the projected 1980 population is 1,066,296.

Agriculture is the main industry, sugar and rice being major export crops, but the mining of bauxite is also making a major contribution to the economy. There is an increasing attempt at industrialization and in this context much more will be heard in future years of the recently commenced Upper Mazaruni hydro-electric project which will involve the impounding of 200 square miles of water to provide energy for the nation's industry.

The Minister of Health is responsible for the Ministry of Health; the Permanent Secretary is the Accounting Officer, and the Chief Medical Officer is responsible for all technical matters relating to health.

The Ministry has overall responsibility for the nation's health, but the Guyana Water Authority, the municipalities and state corporations also have important health functions.

In the 1976 estimates, the Ministry of Health was allocated G\$27 million out of a current expenditure of G\$402 million (7% of the budget), while out of a capital expenditure of G\$261 million, the Ministry was allocated G\$8 million (3% of the budget).

As one of the countries most severely affected by the 1974 economic crisis, Guyana received US\$550,000 from the UN Secretary General's Special Fund. From this the Ministry of Health received approximately US\$442,000 for drugs and equipment.

In the field of communicable diseases, the deteriorated malaria situation in the Rupununi and the North West necessitated the reassignment of a medical advisor to the program as well as an on-the-spot program review with Headquarters staff. In accordance with the recommendations which followed, program management was strengthened by appointing a full-time medical officer and an administrative assistant to the program, and a national Inter-Ministerial Coordinating Committee was set up. There was some improvement in supplies and logistics; entomological studies were conducted to identify the vector responsible for transmission and its sensitivity to DDT, while treatment regimes in the Rupununi were altered when parasitological studies confirmed the presence of chloroquine resistant *P. falciparum*. The training of field personnel and microscopists is being pursued and the backlog of unexamined slides is being reduced. The Government has allocated an extra G\$1 million to meet the emergency.

By mid-1976, general malaria incidence was showing a downward trend. By the end of September, 62,025 smears had been examined; 3,537 were positive, and the blood positivity rate had declined from 9.5% in January 1976 to 5.7%.

Progress with *Aedes aegypti* eradication has been much less positive. Although a new and more realistic agreement has been signed, constraints in management and logistics have still impeded performance. Negotiations are underway for the purchase of vehicles to give greater mobility to the teams, and renewed effort is being made to achieve eradication in Area I, which includes the city of Georgetown and contains 64,100 houses.

With regard to other communicable diseases, in 1975 there were 56 cases of measles, 185 cases of infectious hepatitis, 154 cases of typhoid fever, and 1,054 cases of non-specific gastroenteritis; there were only 2 cases of diphtheria, no case of poliomyelitis and 10 cases of tetanus. There were 54 new cases of leprosy.

The maternal and child health program remains one of the largest and most important programs of the Ministry of Health, providing as it does for about 71% of the population. Latest available figures indicate that the birth rate is 35.5 per 1,000 population, the infant mortality rate 33.6 per 1,000 live births, and maternal mortality is 0.6 per 1,000 live births.

As a result of the introduction of compulsory immunization before school entry, about 95% of primary school children have been immunized against poliomyelitis and 86% against diphtheria and tetanus; however, anemia, malnutrition and gastroenteritis remain important contributory causes of morbidity and mortality among children.

Thirteen high-risk clinics are being conducted and an evaluation study is being carried out, but staff shortages and the widely scattered population have meant that less than optimal care is available to some mothers and children.

Continuing staff shortages have prevented a more vigorous attack on the problems of anemia, protein-calorie malnutrition and avitaminosis which were identified in the 1971 nutrition survey.

A diploma graduate has been recruited to assist the nutritionist at central level with particular reference to supervision of the nutrition activities of maternal and child health clinics. Three new food service supervisors were appointed and three nutrition aides function at the local level. In addition, a FAO/WHO nutritionist assumed duty in Guyana in February 1976.

During the year analysis of the new cases attending maternal and child health clinics revealed 12% of children under five years with grades II and III malnutrition (this figure was 18.2% during the 1971 nutrition survey). Cabinet approval was obtained for the National Food and Nutrition Policy; the Nutrition Association of Guyana was formed and a successful Nutrition Week was promoted. Program emphasis is on further development of the Nutrition Unit, training community nutrition workers, and promoting the implementation of the Food Nutrition Policy.

Dental manpower remains in short supply with a ratio of 0.25 dentists per 10,000 population. Approximately 50% of Government posts in this field remains unfilled. In order to diminish the effect of the dearth of dentists and to emphasize preventive dentistry, especially for children, a Dental Nurse Training School was begun in 1976. This is a two-year program in which ten students are trained annually. Advisory services, fellowships and supplies have been provided to the program, but continuing support is necessary.

The Government is currently reviewing the reports of the technical and economic feasibility study on potable water supply for Georgetown and sewerage systems for Georgetown, New Amsterdam and Linden.

Solid waste disposal continues to pose a problem, and advisory services on this are being provided for Georgetown.

With regard to regional development, the Government's hinterland thrust is characterized by the establishment of several national service camps. These and the previously mentioned Upper Mazaruni hydro-electric project will provide an opportunity for the implementation of primary health care principles. Discussion has begun with the Ministry of Health.

The animal health and veterinary public health program is making slow but steady progress. The Veterinary Public Health Unit was established in 1972 primarily to reduce the incidence of the zoonosis in man and animals and to improve the standard of food hygiene. The Unit has now been vested with authority for meat inspection and is drafting legislation for the inspection of poultry processing plants. Steps are being taken to promote the epidemiological surveillance function through the establishment of a better working relationship between the Unit, the epidemiologist and the Ministry of Agriculture, as well as to improve the standard of meat inspection services.

The establishment of the Veterinary Diagnostic Laboratory has been delayed on account of the UNDP financial crisis; however, construction plans are approved and it is hoped that construction would commence early in 1977. The recruitment of a Project Manager by 1978 would then be necessary.

Several aspects of the nursing services are receiving attention. The report of the patient-centered nursing activity study was completed and copies were distributed to senior nursing personnel and officials of the Ministry of Health. Assistance was given in the planning and implementation of an inservice education program on the organization and management of the hospital nursing services, and in developing the maternal and child health component of the sick nurse dispenser course and the public health nursing component of the basic midwifery program. Planning continued for a study of high-risk antepartum clinics and for the development of a health care delivery system including the proposed new teaching hospital.

There is a need to strengthen the organization and administration of nursing services, to define functions and responsibilities of different categories of nursing personnel, to implement written standards for care of the patient in the hospital and the community, to reduce reliance on the student for patient care in hospital and community, and to ensure that staff expansion takes place *pari passu* with service expansion. There is also a need to define the role of nursing within the health care delivery system in relation to the national goals of extension of coverage and provision of primary care.

The epidemiological surveillance system shows much improvement. A medical officer has been appointed to head the Unit; reports are being received regularly from the periphery and are collated and redistributed. Further development of the Unit requires the assignment of more trained personnel, better utilization of data collected and more specific follow-up action. CAREC has assisted with the training of personnel in laboratory and epidemiological techniques and in organizing a local workshop.

With grant funds from the Medical Research Council of the United Kingdom, a collaborative research project is being carried out to study the *Simuliidae* in the Rupununi savannahs of Guyana with particular reference to their nuisance potential in economic development; their role in disease transmission; and suggesting methods of control and their evaluation.

There is a continuing need for coordination of the resources of the health sector, for improvement of the mechanisms for international cooperation and for institutionalization of the planning process. Attention is being given to all these areas.

Extension of health coverage to the underserved rural areas is one of Government's foremost health priorities. To this end, it is intended to define clearly the system of health care, to implement the concept of levels of care, to institute a system of patient referral, to improve physical facilities, to train personnel including auxiliary personnel, and to strengthen inter- and intrasectoral coordination.

Within the past year several health centers have been remodelled or constructed and plans are underway to improve hospital facilities in Georgetown and New Amsterdam. It is expected that, with the assistance of the IDB, additional health centers, training institutions and laboratory facilities will be built as well as a new national reference teaching hospital at Turkeyen near the University.

Recognizing shortcomings in programming as a constraint to implementation, PAHO/WHO plans to cooperate with the Government in conducting short quarterly seminars on programming and is also seeking to identify impact-producing projects which might be rendered more effective by a multidisciplinary concentration of the Organization's services.

In the field of management, attention is being paid to improving the workflow at Ministry level; in addition, a health program cost accounting subsystem is being developed which is designed to promote more effective utilization of health resources. The maintenance of biomedical equipment, physical facilities and project vehicles continues to pose a serious problem, and the establishment of a preventive maintenance program is being explored.

In all areas the health manpower situation has remained critical. There are about 170 physicians, but these are concentrated mainly on the coast and especially in the urban areas; there are 20 dentists, 632 nurses, 7 veterinarians, 1 public health nutritionist, 5 physiotherapists, 1 occupational therapist and 204 nursing assistants. The Government is therefore placing maximum emphasis on training. It is utilizing, as far as possible, all fellowships allocated; with UNDP assistance courses are held for medical technologists and pharmacists. A new local training course was developed for dental nurses, and the regional educational program for animal and veterinary public health assistants now in its second year has 70 resident students from 15 countries.

However, the shortage of primary health care workers has encouraged the Government to consider the introduction of Medex personnel, and officers of the Ministry of Health will shortly be trained in this methodology at the University of Hawaii. It is anticipated too that very shortly training of all health personnel in Guyana will be conducted within the soon-to-be-established Faculty of Health Sciences of the University of Guyana.

GUYANA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	169,954	58.8	139,120	50.8	317,330	68.0
SERVICES TO INDIVIDUALS -----	93,580	32.4	99,110	36.2	101,480	21.7
COMMUNICABLE DISEASES -----						
0200 MALARIA	49,970	17.3	50,355	18.4	50,100	10.7
0700 AEDES AEGYPTI-BORNE DISEASES	4,200	1.5	8,385	3.1	11,060	2.4
1400 NUTRITION	30,700	10.6	31,060	11.3	32,860	7.0
1600 DENTAL HEALTH	8,710	3.0	9,310	3.4	7,460	1.6
ENVIRONMENTAL HEALTH SERVICES -----	23,800	8.2	11,310	4.1	185,800	39.9
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROGRAM PLANNING AND GENERAL ACTIVITIES	23,800	8.2	11,310	4.1	185,800	39.9
COMPLEMENTARY SERVICES -----	52,574	18.2	28,700	10.5	30,050	6.4
4100 NURSING	27,500	9.5	28,700	10.5	30,050	6.4
4300 EPIDEMIOLOGICAL SURVEILLANCE	25,074	8.7	-	-	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	118,705	41.2	134,715	49.2	149,140	32.0
HEALTH SYSTEMS -----	118,705	41.2	134,715	49.2	149,140	32.0
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	51,700	18.0	54,230	19.8	56,855	12.3
5100 GENERAL PUBLIC HEALTH SYSTEMS	30,390	10.5	41,945	15.3	51,540	11.0
5500 MANAGEMENT SYSTEMS	36,615	12.7	38,540	14.1	40,745	8.7
GRAND TOTAL =====	288,659	100.0	273,835	100.0	466,470	100.0

*LESS THAN .05 PERCENT

GUYANA
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	---FELLOWSHIPS---		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		MONTHS	AMOUNT				
	\$				\$		\$	\$	\$	\$	\$
1977											
PAHO---PR	95,005	12	-	6	49,815	3,000	45	34,650	2,840	4,703	-
PG	25,074	-	-	-	-	6,240	-	-	-	8,094	-
WHO---WR	168,580	48	12	2	128,100	13,600	17	13,090	1,290	2,500	-
TOTAL	288,659	60	12	8	177,915	22,840	62	47,740	4,130	13,294	-
PCT. OF TOTAL	100.0				61.7	7.9		16.5	1.4	4.6	-
1978											
PAHO---PR	100,180	12	-	4	47,540	3,000	46	40,710	-	8,930	-
WHO---WR	173,655	48	12	2	134,830	14,705	12	10,620	-	3,000	-
TOTAL	273,835	60	12	6	182,370	17,705	58	51,330	-	11,930	-
PCT. OF TOTAL	100.0				66.6	6.5		18.7	-	4.4	-
1979											
PAHO---PR	119,945	12	-	5	54,495	3,250	50	51,000	-	11,200	-
WHO---WR	177,325	48	12	2	141,180	16,000	6	6,120	-	3,000	-
UNDP	169,200	24	-	10	153,240	-	14	14,460	-	-	-
TOTAL	466,470	84	12	17	348,915	19,250	70	71,580	-	14,200	-
PCT. OF TOTAL	100.0				74.8	4.1		15.4	-	3.0	-

PAHO-PR-REGULAR BUDGET
 PW-COMMUNITY WATER SUPPLY
 PA-INCAP - REGULAR BUDGET
 PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
 PG-GRANTS AND OTHER CONTRIBUTIONS
 PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
 PJ-GRANTS RELATED TO CAREC
 WHO---WR-REGULAR BUDGET
 UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
 UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
 WO-GRANTS AND OTHER FUNDS

GUYANA
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			32	4,890	32	5,705	32	6,190
	Medical Officer	0.0610	P-4						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			32	4,200	32	4,870	32	5,210
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-1410 (WR)	<u>Nutrition</u>			30	2,450	30	3,850	30	4,185
	Medical Officer	4.0885	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			23	4,360	23	4,625	23	4,890
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			19	2,815	19	3,035	19	3,270
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			24	1,845	24	2,930	24	3,110
	Nurse	0.0887	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			52	7,560	52	8,180	52	8,815
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			41	5,200	41	5,570	41	5,930
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			21	2,600	21	2,785	21	2,965
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			39	6,340	39	6,790	39	7,230
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			10	1,115	10	1,195	10	1,275
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			114	32,685	108	25,000	108	25,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Seminars and Fellowships	4.4357	P-4						
Total All Programs				470	95,660	464	98,015	464	102,890

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

GUYANA - DETAIL

GUYANA-0200, MALARIA ERADICATION

Malaria, reduced by 1972 to a border problem in the Southwest, again became a national emergency in mid-1975 affecting two interior regions in the Rupununi and the Northwest. The number of cases discovered in the country has increased from 42 in 1973 to 72 in 1974, 1,197 in 1975 and to 3,040 in the first seven months of 1976, the respective annual blood positivity rates being 0.07, 0.17, 2.10 and 7.06%.

Various anti-malaria activities have been reinstituted under a new leadership appointed in early 1976, and the country-wide monthly blood positivity rate has been reduced from its height of 9.47% in January 1976 to 5.48% in June 1976. However, the progress of work has been slower than desired due to the presence of resistant strain of *P. falciparum* in the Rupununi, the involvement of scattered, semi-nomadic populations in numerous small localities, and the shortage of personnel, supplies and transportation. Effective coordination of border activities with all neighboring countries is of vital importance.

The specific objectives are: (1) systematic training of malaria personnel; (2) updating of basic information; (3) updating of entomological information; (4) improvement of attack measures; (5) improvement of malaria surveillance/vigilance; (6) improvement of management along with reorganization of structure; (7) improvement of health education; (8) re-establishment of malaria collaborator posts; (9) establishment of a national malaria coordination committee; (10) periodic malaria border meetings with neighboring countries; and (11) promotion of a health infrastructure in the border areas and in the areas with new development projects. PAHO/WHO cooperation at present is in the activities related to objectives (1) through (5) and (10) and will expand to others in the future.

TOTAL		12	12	12	TOTAL	WR	49,970	50,355	50,100
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		34,000	35,700	37,200
4.3395					PERSONNEL-CONSULTANTS		-	3,000	3,400
TOTAL		-	1	1	DUTY TRAVEL		6,000	7,000	7,500
					SUPPLIES AND EQUIPMENT		1,500	2,000	2,000
CONSULTANT MONTHS	WR	-	1	1	FELLOWSHIPS		8,470	2,655	-
TOTAL		11	3	-					
FELLOWSHIP MONTHS	WR	11	3	-					

GUYANA-0700, Aedes aegypti ERADICATION

In Guyana, a phased program was designed in accordance with available funds, with the country divided into three working areas. The program began in the mid-1960's in Area I, comprising Georgetown city and suburbs, East and West Bank Demerara, and East and West Coast Demerara (with 64,100 houses). The progress of work has been slow due to administrative difficulties including shortage of supplies, equipment and transport. The attack phase, consisting of treatment with Baytex and Abate plus periodic verification, is still in progress in Area I, where an overall *Aedes aegypti* index was found to be 4.3% at the end of 1975. An initial survey was carried out in May 1976 in a part of Area II, which consists of the rest of the coastal region from Springlands to Charity. The survey revealed an *Aedes aegypti* index of 0.9%.

The purposes of the project are the eradication of the mosquito from the country and adequate surveillance after eradication. Specific objectives are the systematic training of personnel for improvement of technical skills; more effective management; timely provision of supplies, equipment and transport; and the promotion of health education activities with emphasis on reduction of breeding sources.

TOTAL		1	-	-	TOTAL	PR	4,200	8,385	11,060
CONSULTANT MONTHS	PR	1	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
TOTAL		-	3	3	SUPPLIES AND EQUIPMENT		1,500	5,730	8,000
					FELLOWSHIPS		-	2,655	3,060
FELLOWSHIP MONTHS	PR	-	3	3					

GUYANA-1400, NUTRITION

The Nutrition Survey conducted in the country in 1971 revealed protein-calorie malnutrition (PCM) in children 0-5 years old, anemia in the entire population, principally affecting pregnant women, and general nutrition deficiencies since a large proportion of the population received less than 80% of their nutritional requirements.

The purpose of the project is the improvement of the nutritional status of the population through the following targets: to reduce the prevalence of PCM in the 0-5 year age group; to develop human resources in nutrition to enable the planning and extension of coverage of nutrition activities (in this respect, the health authorities had decided on the planning and development of a course for preparing community workers in nutrition at the local level); to implement the National Food and Nutrition Policy; to promote and disseminate nutrition information; and to improve the Food Service Departments in hospitals. The following are considered important achievements during 1976: the approval of the document "National Food and Nutrition Policy" by the Cabinet; the appointment of a Community Nutrition Diploma graduate to the Nutrition Unit; the assumption of duty by three new Food Service Supervisors; and the organization of the Nutrition Association of Guyana which comprises the nutrition human resources available in the country and other allied professionals.

In spite of efforts of the national authorities, the shortage of manpower is still acute.

	FUND	1977	1978	1979		FUND	1977	1978	1979
							\$	\$	\$
TOTAL		12	12	12	TOTAL	WR	30,700	31,060	32,860
P-3 NUTRITIONIST 4.3083	WR	12	12	12	PERSONNEL-POSTS		25,000	26,200	27,300
TOTAL		3	3	3	DUTY TRAVEL		2,100	2,205	2,500
FELLOWSHIP MONTHS	WR	3	3	3	SEMINAR COSTS		1,290	-	-
					FELLOWSHIPS		2,310	2,655	3,060

GUYANA-1600, DENTAL HEALTH

The expansion of government dental programs has been severely restricted by the shortage of dental manpower.

The objectives of this project are to provide improved dental care to children and to relieve the shortage of dental manpower through the introduction of a two-year dental nurse training program. Promotion of dental health education and updating dental health legislation to give legal status to this new category of staff are also included in the objectives.

TOTAL		2	1	1	TOTAL	WR	8,710	9,310	7,460
CONSULTANT MONTHS	WR	2	1	1	PERSONNEL-CONSULTANTS		5,400	3,000	3,400
TOTAL		3	6	3	SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
FELLOWSHIP MONTHS	WR	3	6	3	FELLOWSHIPS		2,310	5,310	3,060

GUYANA-3100, VETERINARY PUBLIC HEALTH

There has been increasing recognition of the need to establish and develop a veterinary public health program.

The specific objectives of the project are to ascertain and reduce the incidence of the zoonoses in man, to improve standards of food hygiene, to promote the further development of the Veterinary Public Health Unit, to stimulate the enactment of appropriate legislation for the functioning of the Veterinary Public Health Unit, and to cooperate in the establishment of a veterinary diagnostic laboratory.

TOTAL		2	1	1	TOTAL	PR	23,800	11,310	16,600
CONSULTANT MONTHS	PR	2	1	1	PERSONNEL-CONSULTANTS		5,400	3,000	3,400
TOTAL		20	6	10	SUPPLIES AND EQUIPMENT		3,000	3,000	3,000
FELLOWSHIP MONTHS	PR	20	6	10	FELLOWSHIPS		15,400	5,310	10,200

GUYANA-3101, STRENGTHENING VETERINARY SERVICES

The purposes of this project are to assist in the formulation of a national animal health and veterinary public health program to protect human and animal health from zoonotic and other diseases and to increase the effectiveness of the veterinary services by supplying the veterinarian with facilities for prompt and accurate diagnosis.

TOTAL		-	-	24	TOTAL	UNDP	-	-	169,200
P-5 PROJECT MANAGER 4.4768	UNDP	-	-	12	PERSONNEL-POSTS		-	-	108,240
P-4 MICROBIOLOGIST 4.4769	UNDP	-	-	12	PERSONNEL-CONSULTANTS		-	-	45,000
TOTAL		-	-	10	FELLOWSHIPS		-	-	14,460
CONSULTANT MONTHS	UNDP	-	-	10	MISCELLANEOUS COSTS		-	-	1,500
TOTAL		-	-	14					
FELLOWSHIP MONTHS	UNDP	-	-	14					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

GUYANA-4100, NURSING SERVICES

There is a need to obtain information about conditions in health and nursing to prepare proposals for nursing activities that will contribute to the attainment of national public health goals.

The report of the patient-centered nursing activity study was completed, and copies distributed to senior nursing personnel and officials of the Ministry of Health. Discussions were held regarding the development of a health care delivery system including the proposed new teaching hospital.

The process of implementing nursing care standards for the hospitalized patient was continued. Modern nursing administrative techniques are being developed. A staffing pattern for regional hospitals, based on a patient classification system, is being developed.

A system to improve the evaluation of the clinical practice of nursing students was developed and implemented in the Pediatric and Maternity Units of the Georgetown Hospital. Assistance was given in planning the study to be conducted in high-risk antepartum clinics.

The purpose of this project is the organization and development of nursing as a system as defined in the National Health Plan.

TOTAL		12	12	12	TOTAL	WR	27,500	28,700	30,050
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P-3 NURSE	WR	12	12	12	PERSONNEL-POSTS		25,000	26,200	27,300
4.3448					DUTY TRAVEL		2,500	2,500	2,750

GUYANA-4301, TAXONOMY, ECOLOGY, AND VECTOR CONTROL OF THE MAN-BITING SIMULIIDAE

The purpose of the project, supported by the Medical Research Council of the United Kingdom, is to study the Simuliidae in relationship to their nuisance potential in the economic development of the interior, and their possible involvement in disease transmission with particular reference to Onchocerciasis and Venezuela Equine Encephalitis.

TOTAL	PG	25,074	-	-
-----		-----	-----	-----
DUTY TRAVEL		6,240	-	-
SUPPLIES AND EQUIPMENT		6,094	-	-
LOCAL PERSONNEL COSTS		12,740	-	-

GUYANA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The delivery of health care takes place within a system which is not clearly defined and lacks coordination. Many local agencies make a contribution to the health inputs of the community, and internal mechanisms for international cooperation require strengthening.

The general purpose of this project is to promote an awareness of the need to coordinate national resources and to plan and program activities so that the health sector can function within an organized system to achieve the national goal of improving the quality and quantity of health care services. The specific purposes are to promote better intra- and intersectorial coordination of the work of the Ministry of Health, to perfect mechanisms for international cooperation, and to integrate health planning with national development planning.

TOTAL		24	24	24	TOTAL	WR	51,700	54,230	56,855
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P-5 PAHO/WHO REPRESENTATIVE	WR	12	12	12	PERSONNEL-POSTS		38,700	40,730	42,580
4.0382					DUTY TRAVEL		3,000	3,000	3,250
G-6 ADMINISTRATIVE ASSISTANT	WR	12	12	12	COMMON SERVICES		10,000	10,500	11,025
4.3671									

GUYANA-5100, DEVELOPMENT OF HEALTH SERVICES

The Ministry of Health is committed to the goal of extension of coverage with improvement of the quality of care for all its citizens. In view of resource limitation, especially the shortage of personnel and current hinterland development thrust, the Ministry is exploring innovative techniques and the use of auxiliary personnel. Specific programs on which emphasis is being placed are control of communicable diseases, epidemiological surveillance, maternal and child health, and human resource development.

The purposes of this project are to support national efforts to improve the quality of care and to extend coverage, especially to marginal groups and underserved segments of the population.

TOTAL		3	3	4	TOTAL	PR	30,390	41,945	51,540
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	PR	3	3	4	PERSONNEL-CONSULTANTS		8,100	9,000	13,600
					SEMINAR COSTS		2,840	-	-
TOTAL		25	37	37	SUPPLIES AND EQUIPMENT		200	200	200
-----		-----	-----	-----	FELLOWSHIPS <td></td> <td>19,250</td> <td>32,745</td> <td>37,740</td>		19,250	32,745	37,740
FELLOWSHIP MONTHS	PR	25	37	37					

FUND 1977 1978 1979

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\$ \$ \$

GUYANA-5500, MANAGEMENT OF HEALTH SERVICES

The objectives of the project are to promote and facilitate the effective and efficient utilization of scarce health resources by developing a system for evaluating cost versus benefit of each health service and program. The principal target for 1977 is to design and integrate a health program cost accounting subsystem into the Government's general accounting system and to produce related management reports. Local and Area PAHO/WHO staff are providing assistance in designing the general system and in formulating the strategy for acquiring the support and cooperation of the several ministries involved. Subsequently, these staff members will provide assistance in designing the data collection forms and making procedure manuals, and other operational aspects of the project, including some of the activities for training national personnel.

In reference to maintenance the object of the project is to assist the Government in improving the health care services by designing a system for keeping its medical equipment and facilities in a serviceable condition. The principal targets for 1977 are the creation of a pilot maintenance unit in the Ministry of Health, and the implementation of the proposed pilot preventive maintenance program. Local, Area and Washington staff are providing reference material for maintaining many of the critical items of equipment at Georgetown Hospital, as well as advisory services for establishing a preventive maintenance program at Georgetown Hospital and a Maintenance Unit within the Ministry of Health at the central level. Planned future activities for PAHO/WHO staff include assisting the Ministry of Health in determining maintenance policies and procedures, the reporting system and other managerial aspects of the maintenance function, including some training activities.

TOTAL		12	12	12	TOTAL	PR	36,615	38,540	40,745
P-3 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.3724					DUTY TRAVEL		3,000	3,000	3,250

HAITI

Haiti, with its three adjacent islets, occupies the western third of the island known in former times as Hispaniola. It has an area of 27,700 km² and lies between the 18°02' and 20°04' north parallels of latitude and the 71°58' and 74°29' west meridians of longitude.

The country is very mountainous but the coastal and central valleys are extremely fertile. Its cultivated area is estimated at 8,700 km², but it is inadequately exploited because of the low level of technology employed and the very small parcels into which it is subdivided. There is a serious erosion problem in the mountainous areas, caused by deforestation, abundant tropical rains, and the cyclones that frequently strike the island. Watercourses are exploited to some extent either for irrigation or for the production of electric power for the capital, Port-au-Prince, which has 458,674 inhabitants (1971).

The principal export products are coffee, sugar cane, cocoa, sisal, meat, copper, bauxite and handicrafts, and the output of the burgeoning processing industry, which is primarily located in the surroundings of the capital. The principal agricultural products for local consumption are maize, rice, sorghum, beans, yucca and bananas. Goats, pigs, and cattle are raised. Although the Government is making considerable efforts to increase its food production, it is not sufficient to cover the nutritional needs of the population.

The annual per capita income is approximately US\$120 (1972), and the contribution of the various sectors to the GDP is as follows: primary sector, 48.57%; secondary, 15.01%; and tertiary, 36.42% (1972).

According to population estimates for 1975, Haiti has 4,583,785 inhabitants, and the overall population density is 165 inhabitants per km². Approximately 85% of the population lives in the rural areas. The gross death rate is estimated at 14.96 per 1,000 population (1973). The infant mortality rate is 150 per 1,000 live births and the population is increasing at an annual rate of 2.0% (1973). The country has a literate population of 24.7% (1973).

The supply of potable water is inadequate; in the capital 55% of the population has water service, and in the interior of the country there are water systems in the 13 most important cities (4.8% of the population). In this regard, the Government is making efforts to increase the coverage of the water supply systems of the capital, the provincial towns and the rural areas. Several roads between the capital and towns in the interior of the country are being opened up or improved, and small interdepartmental roads are being constructed.

Under the Five-Year Health Plan 1976-1980, recently approved by the Government, the objectives of the policy defined for the health sector are to increase the coverage of health services in rural areas through the construction of new services, improvement of existing services and the equipping of those services, and the training and retraining of personnel; to undertake preventive activities; to eradicate communicable diseases; to improve the nutritional status of the population; to improve the state of health of the maternal and child population, to improve environmental sanitation; to strengthen and adapt the curricula of manpower training schools (physicians, nurses, auxiliaries, multipurpose community agents); and to strengthen relations with other Government departments connected with health such as agriculture and education. All this will be done within the framework of the regionalization and horizontal development of the activities of the national and private institutions existing in the country. The local production of biological materials is also a concern of the Ministry of Public Health and Population.

The Government has obtained external financial aid for a certain number of projects aimed at implementing the policy formulated, and PAHO/WHO is advising the Government in the achievement of the proposed results of the projects. Appropriate coordination of all these activities will make it possible to achieve the goals established for the years ahead.

HAITI
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	1,903,088	80.9	1,873,489	78.7	1,373,033	75.7
SERVICES TO INDIVIDUALS -----	1,464,975	62.3	1,514,255	63.7	938,951	51.8
COMMUNICABLE DISEASES						
0200 MALARIA	194,680	8.3	199,225	8.4	210,340	11.6
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	1,146,976	48.7	1,188,526	50.0	680,206	37.5
1400 NUTRITION	123,319	5.3	126,504	5.3	48,405	2.7
ENVIRONMENTAL HEALTH SERVICES	336,364	14.3	225,284	9.4	302,592	16.7
2100 WATER SUPPLY AND EXCRETA DISPOSAL	290,889	12.4	153,284	6.4	195,532	10.8
2200 SOLID WASTES	-	-	50,000	2.1	100,000	5.5
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROGRAM PLANNING AND GENERAL ACTIVITIES	45,475	1.9	22,000	.9	7,060	.4
COMPLEMENTARY SERVICES	101,749	4.3	133,950	5.6	131,490	7.2
4100 NURSING	101,749	4.3	118,840	5.0	118,570	6.5
4300 EPIDEMIOLOGICAL SURVEILLANCE	-	-	15,110	.6	12,920	.7
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	445,291	19.1	507,847	21.3	441,073	24.3
HEALTH SYSTEMS	407,601	17.4	464,227	19.5	387,223	21.3
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	93,315	4.0	100,450	4.2	105,400	5.8
5100 GENERAL PUBLIC HEALTH SYSTEMS	263,386	11.2	291,017	12.2	222,908	12.3
5500 MANAGEMENT SYSTEMS	50,900	2.2	72,760	3.1	58,915	3.2
DEVELOPMENT OF HUMAN RESOURCES	22,420	1.0	21,310	.9	45,390	2.5
6200 MEDICINE	22,420	1.0	21,310	.9	45,390	2.5
PHYSICAL RESOURCES	15,270	.7	22,310	.9	8,460	.5
7300 PRODUCTION OF BIOLOGICALS	15,270	.7	22,310	.9	8,460	.5
GRAND TOTAL =====	2,348,379	100.0	2,381,336	100.0	1,814,106	100.0

*LESS THAN .05 PERCENT

HAITI
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA II CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA II (PR)	<u>Program Planning and General Activities</u>			180	61,875	180	71,995	180	78,615
	Area Representative	0.0273	D-1						
	Administrative Officer	0.4721	P-3						
AMRO-1320 (PR)	<u>Maternal and Child Health and Family Welfare</u>			18	2,845	18	3,005	18	3,165
	Medical Officer	0.0027	P-4						
AMRO-2020 (WR)	<u>Environmental Health Services</u>			90	14,380	90	15,395	108	19,465
	Sanitary Engineer	4.0864	P-5						
AMRO-3120 (PR)	<u>Animal Health and Veterinary Public Health</u>			90	12,950	90	13,690	90	14,450
	Veterinarian	0.3218	P-4						
AMRO-4120 (PR)	<u>Nursing</u>			90	10,220	90	14,290	90	15,090
	Nurse	0.0889	P-4						
AMRO-5220 (PR)	<u>Medical Care Systems</u>			120	14,560	120	15,355	120	16,170
	Hospital Administrator	0.2188	P-4						
AMRO-5320 (WR)	<u>Health Systems - Planning</u>			90	12,585	90	13,480	90	14,435
	Health Planner	4.3674	P-4						
AMRO-5420 (WR)	<u>Statistics and Information Systems</u>			90	14,355	90	15,295	90	16,395
	Statistician	4.0839	P-4						
	Total All Programs			768	143,770	768	162,505	786	177,785
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

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\$ \$ \$

HAITI - DETAIL

HAITI-0200, MALARIA ERADICATION

The country has an area of 27,752 square kilometers and a population of 4,583,785 inhabitants in 1975-1976, 19,100 square kilometers being considered as malarious (68.82%), with 4,025,070 inhabitants (87.81%). In 1975, out of 346,934 blood slides examined, 24,733 were positive. Although eradication activities are continuing, attack measures in 1976 are limited to semiannual sprayings with DDT (2 g/m²) of nearly 100,000 houses; mass drug distribution to approximately 350,000 inhabitants from January to March and from July onwards in areas where the vector is DDT-resistant; and larviciding, fogging and source reduction works in some localities.

The extension of source reduction activities to a large number of areas is envisaged following feasibility studies, based on epidemiological and entomological findings. The introduction of mosquito fish in some breeding places, such as rice fields and other sources, is being seriously considered. The feasibility of intermittent irrigation of rice fields is being studied.

TOTAL		60	60	60	TOTAL	PR	194,680	199,225	210,340
P-4 EPIDEMIOLOGIST	PR	12	12	12	PERSONNEL-POSTS		164,810	174,070	183,480
.3863					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
P-4 SANITARY ENGINEER	PR	12	12	12	DUTY TRAVEL		10,000	10,000	10,000
.0494					SUPPLIES AND EQUIPMENT		6,000	6,500	7,000
P-2 SANITARIAN	PR	36	36	36	FELLOWSHIPS		8,470	2,655	3,060
.0496 .4219 .4220									
TOTAL		2	2	2					
CONSULTANT MONTHS	PR	2	2	2					
TOTAL		11	3	3					
FELLOWSHIP MONTHS	PR	11	3	3					

HAITI-1300, FAMILY HEALTH AND POPULATION DYNAMICS

The general objectives of this project are the reduction of maternal and child mortality and morbidity and the promotion of the health and well-being of the family. Specifically, the project aims to extend coverage and utilization of the prenatal, post-natal, child health and family planning services, with special emphasis on the rural areas and on the utilization of community-based personnel.

Major activities during the next four years include strengthening of the administration and organization of the program at the regional and district level, with emphasis on the integration of maternal and child health and family planning services within the general health services of the Ministry of Health; training of health and community personnel; strengthening of service statistics and program evaluation procedures; conducting of simple operational research studies to permit the program to expand its rural approach; and expansion of community education activities, particularly in rural areas.

UNFPA has been providing substantial financial support towards the development of this project since 1972. AID and the Pathfinder Fund are also collaborating.

TOTAL		24	12	-	TOTAL	UNFPA	1,146,976	1,188,526	680,206
P-4 PROJECT MANAGER	UNFPA	12	6	-	PERSONNEL-POSTS		39,970	20,000	-
4.3842					PERSONNEL-CONSULTANTS		12,000	15,000	5,000
G-5 SECRETARY	UNFPA	12	6	-	DUTY TRAVEL		2,000	1,000	-
4.3365					CONTRACTUAL SERVICES		37,696	23,500	17,250
TOTAL		4	5	3	SUPPLIES AND EQUIPMENT		251,729	627,000	314,534
CONSULTANT MONTHS	UNFPA	4	5	3	FELLOWSHIPS		17,182	-	21,170
TOTAL		22	-	21	GRANTS		13,500	-	-
FELLOWSHIP MONTHS	UNFPA	22	-	21	MISCELLANEOUS COSTS		107,610	122,500	71,191
					COURSE COSTS		12,830	35,000	27,986
					LOCAL PERSONNEL COSTS		652,459	344,526	219,075

HAITI-1400, NUTRITION

Protein-calorie malnutrition, vitamin A deficiency and nutrition anemias are serious public health problems. The purposes of this project are to strengthen nutrition activities in the health and agriculture sectors; to improve nutrition education; to prevent and treat clinical malnutrition; and to increase specialized manpower in the field of nutrition.

TOTAL		24	24	12	TOTAL		123,319	126,504	48,405
P-4 NUTRITIONIST	PR	12	12	12	SUBTOTAL	PR	77,005	78,380	48,405
.3865					PERSONNEL-POSTS		39,475	41,675	43,905
P-3 NUTRITIONIST	PG	12	12	-	DUTY TRAVEL		1,500	1,500	1,500
.4402					SUPPLIES AND EQUIPMENT		6,000	6,000	3,000
TOTAL		35	33	-	FELLOWSHIPS		30,030	29,205	-
FELLOWSHIP MONTHS	PR	35	33	-					

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FUND 1977 1978 1979

\$ \$ \$

SUBTOTAL	PG	39,966	42,700	-
PERSONNEL-POSTS		26,166	28,000	-
DUTY TRAVEL		1,300	1,700	-
SUPPLIES AND EQUIPMENT		12,500	13,000	-
SUBTOTAL	PH	6,348	9,424	-
GRANTS		6,348	9,424	-

HAITI-2100, WATER SUPPLIES

Through this project, PAHO/WHO cooperates with the Government in constructing simple water supply systems designed to benefit localities of approximately 1,000 inhabitants, open, dug wells with facilities and manually operated pumps for the water supply of smaller communities, and sanitary latrines in rural areas.

UNICEF will supply equipment and working materials, and the community will supply manpower and limited expenses.

TOTAL		24	24	24	TOTAL	PR	98,255	81,835	94,315
P-4 SANITARY ENGINEER .1058	PH	12	12	12	PERSONNEL-POSTS		54,935	58,025	75,795
P-2 SANITARIAN .3533	PR	12	12	12	PERSONNEL-CONSULTANTS		16,200	-	3,400
TOTAL		6	-	1	DUTY TRAVEL		2,500	3,500	3,500
CONSULTANT MONTHS	PR	6	-	1	SUPPLIES AND EQUIPMENT		10,000	15,000	5,500
TOTAL		6	6	6	FELLOWSHIPS		4,620	5,310	6,120
FELLOWSHIP MONTHS	PR	6	6	6	GRANTS		10,000	-	-

HAITI-2101, PROVISION OR IMPROVEMENT OF WATER SERVICE IN TEN MEDIUM-SIZED CITIES

Only 14.4% of the urban population, excluding the metropolitan area of Port-au-Prince, receives water through household connections. In rural areas (localities with fewer than 5,000 inhabitants) estimates are that less than 1.0% of the population has household connections and only 2.9% have easy access to the water systems. Also, the installations are obsolete and insufficient, and the service is irregular and unreliable due to a lack of periodic chlorination.

The purposes of the project are to expand and improve existing water systems and to begin the construction of new systems so as to increase the percentage of the population receiving these services; to improve the operation and maintenance of existing installations; to improve water quality through periodic chlorination, and to strengthen the institutional development of the government agency (Water Supply Services) in charge of water systems.

TOTAL		24	-	-	TOTAL		135,300	-	-
P-4 PROJECT MANAGER 4.4581	UNDP	12	-	-	SUBTOTAL	PR	2,700	-	-
G-5 SECRETARY 4.4582	UNDP	12	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
TOTAL		7	-	-	SUBTOTAL	UNDP	132,600	-	-
CONSULTANT MONTHS	PR	1	-	-	PERSONNEL-POSTS		52,800	-	-
CONSULTANT MONTHS	UNDP	6	-	-	PERSONNEL-CONSULTANTS		22,550	-	-
					DUTY TRAVEL		1,250	-	-
					CONTRACTUAL SERVICES		45,000	-	-
					MISCELLANEOUS COSTS		5,000	-	-
					LOCAL PERSONNEL COSTS		6,000	-	-

HAITI-2102, INSTITUTIONAL DEVELOPMENT OF THE CENTRALE AUTONOME MÉTROPOLITAINE D'EAU POTABLE

Estimates are that at the end of 1975 only 45% of the urban population had water services. This is a considerable reduction from the previous year and can be explained by rapid urban growth and the lack of expansion of water services. At the present time, Port-au-Prince has finished the second stage in the expansion of its water supply services, which entails better service and greater coverage for the population. The works were finished in October 1976, and steps have been started for developing a project for the construction of a third stage. The final plans are expected to be ready early in 1977.

The purposes of this project are to develop a program for the institutional strengthening of the Centrale Autonome Métropolitaine d'Eau Potable, which is the agency in charge of operating the above-mentioned water supply, and which coordinates all foreseeable elements in order to improve the Capital's water supply and, therefore, contribute to economic development, improvement of health conditions and the comfort of the inhabitants of Port-au-Prince.

TOTAL		12	12	12	TOTAL	PW	57,334	71,449	26,217
P-4 PROJECT MANAGER .4759	PW	12	12	12	PERSONNEL-POSTS		29,300	40,935	25,217
TOTAL		8	7	-	PERSONNEL-CONSULTANTS		22,974	22,974	-
CONSULTANT MONTHS	PW	8	7	-	DUTY TRAVEL		2,000	2,000	1,000
TOTAL		3	5	-	SUPPLIES AND EQUIPMENT		1,000	1,000	-
FELLOWSHIP MONTHS	PW	3	5	-	FELLOWSHIPS		2,060	4,540	-

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\$ \$ \$

HAITI-2103, DRINKING-WATER SUPPLY FOR RURAL AREAS

The objectives of the project are to carry out various feasibility studies concerning the supply of drinking water to small rural settlements; and to assist in the provision of drinking water supplies.

TOTAL	-	-	8	TOTAL	UNDP	-	-	75,000
-----	-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	UNDP	-	-	8	PERSONNEL-CONSULTANTS	-	-	36,000
				CONTRACTUAL SERVICES	-	-	-	39,000

HAITI-2200, SOLID WASTE DISPOSAL

The objectives of the project are: to study the present system of garbage collection and disposal; to select and assist in the establishment of two pilot garbage collection and disposal areas; and to assess the results of the pilot operations so that they may be extended to other areas.

TOTAL	-	6	12	TOTAL	UNDP	-	50,000	100,000
-----	-----	-----	-----	-----	-----	-----	-----	-----
P-5 PROJECT MANAGER 4.4931	UNDP	-	6	12	PERSONNEL-POSTS	-	28,000	62,160
				PERSONNEL-CONSULTANTS	-	16,000	-	22,500
				SUPPLIES AND EQUIPMENT	-	6,000	-	15,340
TOTAL	-	4	5					
-----	-----	-----	-----					
CONSULTANT MONTHS	UNDP	-	4	5				

HAITI-3100, VETERINARY PUBLIC HEALTH

The Veterinary Service is at the beginning of its development and includes two veterinary doctors who returned from abroad and 34 auxiliary veterinarians trained locally. Three auxiliaries received six months' training at CEPANZO in laboratory techniques with emphasis on rabies and anthrax which are the principal zoonoses in the country. A control program and vaccination of animal rabies and anthrax exist and a part of the vaccine has been supplied by PAHO/WHO.

TOTAL	12	-	-	TOTAL	PR	45,475	22,000	7,060
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P-4 VETERINARIAN .4127	PR	12	-	-	PERSONNEL-POSTS	39,475	-	-
				PERSONNEL-CONSULTANTS	-	18,000	-	-
				DUTY TRAVEL	2,000	-	-	-
TOTAL	-	6	-	SUPPLIES AND EQUIPMENT	4,000	4,000	-	4,000
-----	-----	-----	-----	FELLOWSHIPS	-	-	-	3,060
CONSULTANT MONTHS	PR	-	6	-				
TOTAL	-	-	3					
-----	-----	-----	-----					
FELLOWSHIP MONTHS	PR	-	-	3				

HAITI-4100, NURSING SERVICES

Nursing services in the country are inadequate due to the limited number of adequately trained personnel at various levels and also because of the maldistribution of personnel, located mainly in urban areas, when 80% of the population is rural. Standards have been defined for nursing care of the hospitalized patient; standards of care are still required for the non-hospitalized or community patient. Training of auxiliary personnel has increased with the opening of a new school in the southern region (Les Cayes). However, another level of health personnel is urgently needed to extend primary health care coverage to the peripheral areas of the country.

TOTAL	12	12	12	TOTAL	PR	40,815	43,040	52,875
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P-3 NURSE .3516	PR	12	12	12	PERSONNEL-POSTS	33,615	35,540	37,495
				PERSONNEL-CONSULTANTS	2,700	3,000	-	6,800
				DUTY TRAVEL	1,500	1,500	-	1,500
TOTAL	1	1	2	SUPPLIES AND EQUIPMENT	3,000	3,000	-	3,000
-----	-----	-----	-----	FELLOWSHIPS	-	-	-	4,080
CONSULTANT MONTHS	PR	1	1	2				
TOTAL	-	-	4					
-----	-----	-----	-----					
FELLOWSHIP MONTHS	PR	-	-	4				

HAITI-4301, EPIDEMIOLOGICAL SURVEILLANCE

Although communicable diseases are the most important cause of morbidity and a major cause of mortality in the country, there is no functioning system of epidemiologic surveillance.

This project has as its objective the creation of an epidemiologic surveillance system capable of diagnosing the most prevalent communicable diseases and of avoiding the epidemic pattern of their appearance.

TOTAL	-	2	2	TOTAL	PR	-	15,110	12,920
-----	-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	PR	-	2	2	PERSONNEL-CONSULTANTS	-	6,000	6,800
TOTAL	-	6	6	SUPPLIES AND EQUIPMENT	-	3,800	-	-
-----	-----	-----	-----	FELLOWSHIPS	-	5,310	-	6,120
FELLOWSHIP MONTHS	PR	-	6	6				

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

HAITI-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The Government has defined its health policy as the extension of coverage to rural areas to provide minimum services to the majority of the population. Emphasis is given to preventive measures, maternal and child health, communicable diseases and environmental sanitation, as well as to the creation of an appropriate administrative structure at the Ministry of Health.

TOTAL		48	48	48	TOTAL	PR	93,315	100,450	105,400
-----		----	----	----	-----		-----	-----	-----
P-5 PAHO/WHO REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		64,515	70,310	74,350
.0500					DUTY TRAVEL		2,000	2,000	1,500
G-6 ADMINISTRATIVE ASSISTANT	PR	12	12	12	COMMON SERVICES		26,800	28,140	29,550
.0504									
G-5 SECRETARY	PR	12	12	12					
.4840									
G-4 CLERK	PR	12	12	12					
.4044									

HAITI-5100, DEVELOPMENT OF HEALTH SERVICES

Over the next four years, activities toward the strengthening of health services in the country will be developed in line with two main objectives: the reorganization of the health care delivery system following a regionalization scheme; and the extension of medical coverage to underserved areas with the use of appropriate facilities, manpower and technology.

TOTAL		84	96	78	TOTAL		375,220	439,577	347,518
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P-5 PROJECT MANAGER	PG	12	12	-	SUBTOTAL	PR	66,885	82,215	86,400
.4911									
P-4 ADMIN. METHODS OFFICER	PG	6	12	6					
.4929					PERSONNEL-POSTS		61,885	77,215	81,400
P-4 MEDICAL OFFICER	PR	12	12	12	DUTY TRAVEL		5,000	5,000	5,000
.4456									
P-4 MEDICAL OFFICER	WR	12	12	24	SUBTOTAL	PG	172,835	215,802	53,363
4.3385 4.4844									
P-3 ADMIN. METHODS OFFICER	WR	12	12	12	PERSONNEL-POSTS		108,074	151,040	21,615
4.3582					PERSONNEL-CONSULTANTS		8,005	8,006	-
P-3 NURSE	PR	12	12	12	DUTY TRAVEL		3,280	3,280	1,000
.4657					FELLOWSHIPS		30,746	30,746	30,748
P-3 NURSE	PG	12	12	-	COURSE COSTS		22,730	22,730	-
.4912									
P-3 NURSE	WR	-	-	12	SUBTOTAL	WR	135,500	141,560	207,755
4.4605									
P-3 SANITARIAN	PG	6	12	-	PERSONNEL-POSTS		73,400	78,700	140,835
.4930					PERSONNEL-CONSULTANTS		-	6,000	10,200
					DUTY TRAVEL		5,000	5,000	10,000
TOTAL		2	4	3	SUPPLIES AND EQUIPMENT		34,000	20,000	10,000
CONSULTANT MONTHS	PG	2	2	-	FELLOWSHIPS		23,100	31,860	36,720
CONSULTANT MONTHS	WR	-	2	3					
TOTAL		74	74	70					
FELLOWSHIP MONTHS	PG	44	38	34					
FELLOWSHIP MONTHS	WR	30	36	36					

HAITI-6200, MEDICAL EDUCATION

The medical school is graduating only approximately 120 physicians per year. There is no full-time teaching staff, and the educational objectives are not clearly defined. A medical library with approximately 5,000 books and visual aids is available for perusal of students and staff.

The purposes of this project are to support the medical library through retraining and supervision of its staff and to improve teaching through preparation of teachers, supply of visual aids, and curriculum revision to meet the real needs of the country.

TOTAL		-	-	12	TOTAL	PR	22,420	21,310	45,390
-----		----	----	----	-----		-----	-----	-----
P-4 MEDICAL OFFICER	PR	-	-	12	PERSONNEL-POSTS		-	-	29,270
.4841					PERSONNEL-CONSULTANTS		10,800	9,000	-
					DUTY TRAVEL		-	-	2,000
TOTAL		4	3	-	SUPPLIES AND EQUIPMENT		7,000	7,000	8,000
					FELLOWSHIPS		4,620	5,310	6,120
CONSULTANT MONTHS	PR	4	3	-					
TOTAL		6	6	6					
FELLOWSHIP MONTHS	PR	6	6	6					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

HAITI-7300, PRODUCTION OF DRUGS AND BIOLOGICALS

No drugs or pharmaceutical products are manufactured or packaged in the country and the Government is seriously concerned about the important expenditures it must make for purchasing these items on the international market. The importation of all types of solutions for intravenous use is particularly expensive.

This project aims at maximizing the purchasing power of the budget through the local production and/or packaging of drugs, medicines and solutions.

TOTAL		3	4	1	TOTAL	15,270	22,310	8,460
CONSULTANT MONTHS	PR	-	4	1				
CONSULTANT MONTHS	WR	3	-	-	SUBTOTAL	PR	-	22,310
								8,460
TOTAL		6	4	3	PERSONNEL-CONSULTANTS	-	12,000	3,400
					SUPPLIES AND EQUIPMENT	-	5,000	2,000
FELLOWSHIP MONTHS	PR	-	6	3	FELLOWSHIPS	-	5,310	3,060
FELLOWSHIP MONTHS	WR	6	-	-	SUBTOTAL	WR	15,270	-
								-
					PERSONNEL-CONSULTANTS	8,100	-	-
					SUPPLIES AND EQUIPMENT	2,550	-	-
					FELLOWSHIPS	4,620	-	-

HONDURAS

Honduras is a tropical country, located in Central America, and has an area of 112,088 km². According to the 1974 census, its population numbers 2,781,000 inhabitants, of which 62.5% is rural and 37.5%, urban. The population density is 23.7 inhabitants per km².

The general birth rate of the country is 46.6 per 1,000 inhabitants. The annual rate of increase is 3.2%, the result being a predominantly young population, 46.8% of which are under 15 years of age.

The educational level is low, 45% of the population over 15 years of age being illiterate. Furthermore, the educational system can only cover 80% of the children; approximately 111,000 children of school age are without educational facilities. To this must be added the high dropout rate at all levels; of every 100 children enrolled in the first grade of primary school, only three complete high school education and barely one, university studies.

In 1974, the GDP was US\$989.3 million, and the per capita GDP, US\$372.7. Although the GDP grew at a rate of 5.3% during the period 1961-1968, there was subsequently a downturn in the growth rate of the Honduran economy and an increase in inflationary pressures due primarily to Hurricane Fifi and the sharp rise in the prices of petroleum, petroleum derivatives, and other basic imported goods and services. In the period 1970-1973, the growth rate was 4%, and in 1974-1975, approximately 0.5%. In 1975 the effects of the hurricane, the continuing high prices of basic imported products, the world recession and the prolonged drought, which primarily affected the grain crop, were the causes of the precarious economic situation in the previous year. The result is that Honduras is relatively the least developed country in Latin America and the average per capita income is US\$250.

Despite the low level of economic growth achieved in the period 1974-1976, it was a constructive period in that, during it, important institutional changes were begun. In addition, a start was made on the principal projects included in the National Economic and Social Development Plan 1975-1979, which were aimed at transforming the economic structure of the country and accelerating socioeconomic progress. The basis of the Plan is the Agrarian Reform Law and the regulations made under it. Indeed, agriculture, which is the principal economic activity in Honduras, contributes almost one-third of the GDP, employs about two-thirds of the economically active population, generates approximately 70% of the export earnings, and is one of the fundamental priorities of the Development Plan.

According to the situation described, the context in which health activities must be carried out in Honduras is as follows: typical ecological environment of a tropical region, with a predominantly young population settled for the most part in the rural areas and with an economy in which agriculture is the basis of employment and production. As a result, the health level is reflected in the following figures: life expectancy at birth, 52.7 years on average; general mortality, 14.2 per 1,000 population, urban mortality being 9.0 and rural mortality 16.5; infant mortality, 117.6 per 1,000 live births (urban 85.1 and rural 128.1); and maternal mortality, 2.7 per 1,000 live births; deaths of children under five years of age account for approximately 41% of all deaths. The health level is strongly influenced by malnutrition (it is estimated that 72.5% of all children suffer from some degree of protein-calorie malnutrition) and by the low level of environmental sanitation.

To cope with this situation, in 1974 the Ministry of Health, together with the Consejo Superior de Planificación Económica, designed the guidelines of the National Health Plan and incorporated them into the National Development Plan. The basic goal of the Health Plan is the extension of coverage to 100% of the population and the design of specific medium- and short-term programs. These include estimates of production and outputs, physical investments, human resources, financing, and information and supplies in the following priority areas: community participation, disease control, maternal and child health, epidemiology and environmental sanitation. The goal of the Plan for 1980 is an increase in life expectancy at birth to 57.5 years on average and its specific goals are those determined in the adjustment of the goals of the country to those of the Ten-Year Health Plan for the Americas. The organizational apparatus, through which the Plan will be carried out, consists of the following resources: 17 hospitals which contain 3,235 beds or 1.16 beds per 1,000 population; 318 rural health centers (CESARES); 419 out of a total of 836 physicians practicing in the country (2.9 physicians per 10,000 population), and only 387 graduate nurses. As regards financial resources, the 1976 budget amounted to US\$26,000,000, which constitutes 13% of the total national budget.

The resources described, which are clearly insufficient to achieve the proposed goals, will be activated by national resources and external loans, among which special mention must be made of an IDB loan for US\$14,000,000. The physical goals for the development of infrastructure up to 1980 are the construction of two regional hospitals (Comayagua and San Pedro Sula); eight emergency hospital centers (CHE), and 243 CESARES. Once the program is completed, it is hoped to prevent a deterioration in the bed index and, in fact, to slightly increase it from 1.16 to 1.19 per 1,000 population, and to achieve a better distribution of beds in the rural areas, in which the index will increase by 141%; hospital discharges will be increased by 60% in general and by 250% in the rural areas, and medical care consultations will be increased by 60%.

The organization of the Ministry of Health and its regional level units is established on the basis of complexity levels that range from the minimum level CESARES, to the higher level, the Teaching-Hospital in Tegucigalpa, through the intermediate levels, CHE, and regional hospitals. This State organization is called the formal subsystem and is coordinated and linked with the community organization or informal subsystem through two fundamental elements: the transfer of technology towards the informal subsystem and the referral of patients from the informal to the formal subsystem.

Community organization and participation, which is the fundamental basis for achieving extension of coverage, is undertaken by local health committees composed of health guardians and lay midwives.

Responsibility for the education and training of manpower at all levels for the two subsystems is shared between the Autonomous University of Honduras and the Ministry of Health, and manpower training programs up to 1980 have been designed in close coordination with the General Health Plan.

HONDURAS
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	320,872	21.3	278,207	45.0	156,685	30.3
ENVIRONMENTAL HEALTH SERVICES	233,387	15.5	189,222	30.6	63,765	12.3
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	62,905	4.2	56,250	9.1	63,765	12.3
2100 WATER SUPPLY AND EXCRETA DISPOSAL	27,602	1.8	-	-	-	-
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROGRAM PLANNING AND GENERAL ACTIVITIES	143,280	9.5	132,972	21.5	-	-
COMPLEMENTARY SERVICES	87,485	5.8	88,985	14.4	92,920	18.0
4300 EPIDEMIOLOGICAL SURVEILLANCE	87,485	5.8	88,985	14.4	92,920	18.0
II. DEVELOPMENT OF THE INFRASTRUCTURE	1,184,100	78.7	340,395	55.0	360,200	69.7
HEALTH SYSTEMS	1,075,240	71.5	227,915	36.8	245,620	47.5
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	64,440	4.3	69,235	11.2	73,270	14.2
5100 GENERAL PUBLIC HEALTH SYSTEMS	77,182	5.1	66,470	10.7	89,945	17.4
5200 MEDICAL CARE SYSTEMS	485,855	32.3	44,625	7.2	21,220	4.1
5500 MANAGEMENT SYSTEMS	447,763	29.8	47,585	7.7	61,185	11.8
DEVELOPMENT OF HUMAN RESOURCES	108,860	7.2	112,480	18.2	114,580	22.2
6200 MEDICINE	5,010	.3	5,655	.9	6,460	1.2
6400 ENVIRONMENTAL SCIENCES	4,450	.3	4,750	.8	5,150	1.0
6900 OTHER	99,400	6.6	102,075	16.5	102,970	20.0
GRAND TOTAL	1,504,972	100.0	618,602	100.0	516,885	100.0

*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL				DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT		MONTHS	AMOUNT				
1977	\$				\$		\$		\$	\$	\$	\$
PAHO---PR	276,055	68	12	6	218,640	14,965	26	20,020	5,400	5,030	-	12,000
PW	27,602	6	-	2	24,312	1,000	3	2,290	-	-	-	-
PG	1,008,523	30	-	98	441,568	11,815	424	296,989	79,296	29,930	-	148,925
PH	4,547	-	-	-	-	-	-	-	-	4,547	-	-
WHO---WR	188,245	12	-	5	55,500	3,500	69	53,130	8,390	37,725	20,000	10,000
TOTAL	1,504,972	116	12	111	740,020	31,280	522	372,429	93,086	71,232	20,000	170,925
PCT. OF TOTAL	100.0				49.2	2.1		24.8	6.2	5.1	1.3	11.3
1978												
PAHO---PR	293,120	64	12	2	223,155	15,040	28	24,780	9,400	8,145	-	12,600
PG	132,972	24	-	1	106,333	7,189	24	19,450	-	-	-	-
WHO---WR	192,510	12	-	5	60,200	3,700	69	61,065	6,000	31,545	20,000	10,000
TOTAL	618,602	100	12	8	389,688	25,929	121	105,295	15,400	39,690	20,000	22,600
PCT. OF TOTAL	100.0				63.0	4.2		17.0	2.5	6.4	3.2	3.7
1979												
PAHO---PR	328,905	60	12	3	224,435	14,740	59	60,180	9,400	6,920	-	13,230
WHO---WR	187,980	12	-	5	65,700	3,700	58	59,160	6,000	36,420	10,000	7,000
TOTAL	516,885	72	12	8	290,135	18,440	117	119,340	15,400	43,340	10,000	20,230
PCT. OF TOTAL	100.0				56.1	3.6		23.1	3.0	8.4	1.9	3.9

PAHO-PR-REGULAR BUDGET

PW-COMMUNITY WATER SUPPLY

PA-INCAP - REGULAR BUDGET

PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS

PG-GRANTS AND OTHER CONTRIBUTIONS

PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND

PJ-GRANTS RELATED TO CAREC

WHO---WR-REGULAR BUDGET

UNDP-UNITED NATIONS DEVELOPMENT PROGRAM

UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES

WD-GRANTS AND OTHER FUNDS

HONDURAS
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III	<u>Program Planning and General Activities</u>			50	27,935	50	29,490	50	31,450
AMRO-5030(PR/WR)	Area Representative Seminar Costs	0.0283	D-1						
AMRO-1330 (PR/PG) AMRO-1331	<u>Maternal and Child Health and Family Welfare</u>			54	13,710	54	12,615	54	10,585
	Medical Officer Consultants and Seminars	0.3365	P-5						
AMRO-2030(PR/WR)	<u>Environmental Health Services</u>			75	8,800	70	14,130	100	19,625
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130 (PR/WR/ AMRO-3131 PG/WT) AMRO-3230	<u>Animal Health and Veterinary Public Health</u>			220	56,990	225	47,585	160	37,680
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687	P-3						
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			235	27,685	295	37,418	300	39,528
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330 (PR/WR) AMRO-4331	<u>Epidemiological Surveillance</u>			30	8,035	30	8,505	30	11,420
	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			54	6,985	54	7,315	54	7,650
	Health Planner	0.2031	P-4						
AMRO-5430(PR/WR)	<u>Statistics and Information Systems</u>			54	9,210	54	9,835	54	10,555
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>	0.4800	P-3	50	5,435	50	5,705	50	5,975
	Administrative Methods Officer								
AMRO-6030 (PR)	<u>Development of Human Resources</u>			54	4,295	54	6,775	54	7,290
	Health Manpower Officer	0.3627	P-4						
	<u>Total All Program</u>			876	169,080	936	179,373	906	181,758

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

HONDURAS - DETAIL

HONDURAS-2000, ENGINEERING AND ENVIRONMENTAL SCIENCES

The aim of the project is to promote and improve the technical and administrative structure of the environmental sanitation services, including potable water supplies and sewerage services. The immediate goals for the current decade are to improve and extend water supply and sewerage services of the Central District of Tegucigalpa and 15 smaller cities in the interior and to construct 150 rural water supply systems so as to provide 64.6% of the urban population with potable water and serve 33.1% of the rural sector; to provide disinfection facilities for 100% of the urban water supply systems; to provide sewerage services for 45.6% of the urban areas and proper excreta disposal facilities for 42.0% of the rural sector; and to provide 70.0% of the localities with more than 20,000 inhabitants with satisfactory systems for the collection and disposal of solid wastes.

TOTAL		12	12	12	TOTAL	PR	62,505	56,250	63,765
P-4 SANITARY ENGINEER .0512	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					PERSONNEL-CONSULTANTS		13,500	3,000	6,800
TOTAL		5	1	2	DUTY TRAVEL		1,840	1,840	1,840
					SUPPLIES AND EQUIPMENT		760	-	-
CONSULTANT MONTHS	PR	5	1	2	FELLOWSHIPS		6,930	9,735	11,220
TOTAL		9	11	11					
FELLOWSHIP MONTHS	PR	9	11	11					

HONDURAS-2100, WATER SUPPLIES

The purposes of the project are to improve and extend the systems of Tegucigalpa and of 15 cities in the interior by 1980 so as to provide satisfactory services for 64.6% of the urban population; to build 150 water supply systems to benefit 33.1% of the rural sector; and to strengthen the National Autonomous Water and Sewerage Service financially and institutionally, as well as in the area of human resources.

TOTAL		1	-	-	TOTAL	PW	3,334	-	-
CONSULTANT MONTHS	PW	1	-	-	PERSONNEL-CONSULTANTS		3,334	-	-

HONDURAS-2101, WATER SUPPLIES AND SEWERAGE IN SAN PEDRO SULA

The purpose of this project is to provide technical advisory services to the Municipal Department of San Pedro Sula, the technical municipal agency responsible for providing the potable water supply and sanitary sewerage and storm sewerage systems. This assistance is provided to strengthen the systems established during the development of the program.

TOTAL		6	-	-	TOTAL	PW	19,200	-	-
P-4 MANAGEMENT ADVISER .4474	PW	6	-	-	PERSONNEL-POSTS		18,200	-	-
					DUTY TRAVEL		1,000	-	-

HONDURAS-2102, ADVISORY SERVICES IN WATER SUPPLIES

The city of San Pedro Sula, whose present population is estimated at 150,000, is the country's main industrial center. Its urban and industrial expansion call for significant improvements in the present infrastructure of water and sewerage services and for the establishment of a technical and administrative organization providing adequate services. The project proposes to create the legal basis for the formation of a water supply agency with administrative autonomy, develop an organic structure for this agency, and efficiently organize the department responsible for the operation and maintenance of water supply systems and the department of supplies of the new water agency.

TOTAL		1	-	-	TOTAL	PW	5,068	-	-
CONSULTANT MONTHS	PW	1	-	-	PERSONNEL-CONSULTANTS		2,778	-	-
TOTAL		3	-	-	FELLOWSHIPS		2,290	-	-
FELLOWSHIP MONTHS	PW	3	-	-					

HONDURAS-3100, VETERINARY PUBLIC HEALTH

The purpose of this project is to establish a sanitation and administration structure including a central diagnostic laboratory and regional laboratories, a quarantine station, central administrative offices and a regional office, as well as a sanitary campaign for the control and eradication of brucellosis and bovine tuberculosis.

FUND				FUND			
1977 1978 1979				1977 1978 1979			
-----				-----			

FUND				FUND			
1977	1978	1979		1977	1978	1979	
-----	-----	-----	-----	-----	-----	-----	-----
\$	\$	\$		\$	\$	\$	
TOTAL	12	12	12	TOTAL	PR	45,705	66,470 89,945
P-4 MEDICAL OFFICER	PR	12	12 12	PERSONNEL-POSTS		26,315	41,675 43,905
.4036				DUTY TRAVEL		3,000	3,000 3,000
TOTAL		11	11 31	SUPPLIES AND EQUIPMENT		3,920	4,060 3,420
FELLOWSHIP MONTHS	PR	11	11 31	FELLOWSHIPS		8,470	9,735 31,620
				COURSE COSTS		4,000	8,000 8,000

HONDURAS-5102, EMERGENCY ASSISTANCE

The objectives of this program are to achieve immediate recovery of the health infrastructure of the areas directly affected by hurricane "Fifi," comprising 25,000 square kilometers with a population of approximately 850,000 inhabitants, which is 32% of the total population; to expand the new infrastructure to meet the needs of the population; to continue the health programs undertaken by the Ministry of Public Health and Social Welfare in these areas, with special emphasis on satisfying the demand for medical care; to immunize susceptible population groups in order to reach useful levels of protection; to develop programs for the construction of rural water supply systems and latrines; to improve rural dwellings and waste disposal systems; and to construct or improve public slaughterhouses.

TOTAL		31,477	-	-
SUBTOTAL	PG	26,930	-	-
SUPPLIES AND EQUIPMENT		26,930	-	-
SUBTOTAL	PH	4,547	-	-
SUPPLIES AND EQUIPMENT		4,547	-	-

HONDURAS-5200, MEDICAL CARE SERVICES

The objectives of this project include cooperating with the Government in the reorganization of medical care and hospital services, completing the integration of hospitals and health centers, and training personnel in medical and hospital care.

The hospital technical and administrative restructuring will continue throughout 1977-1980 and the capacity to meet the demand for medical care will be increased through the operation of the Tegucigalpa Hospital-School, eight emergency hospital centers and four regional hospitals. The Hospital-School should be integrated into the health system and should be at the apex of the pyramid. It will occupy a strategic position in reference and cross-reference in the different levels of health care.

TOTAL		11	11	11	TOTAL	WR	28,470	29,735	21,220
FELLOWSHIP MONTHS	WR	11	11	11	FELLOWSHIPS		8,470	9,735	11,220
					GRANTS		20,000	20,000	10,000

HONDURAS-5201, HOSPITAL PLANNING AND ADMINISTRATION

The Hospital-School project resulting from the agreement signed in December 1973 by the Ministry of Public Health, the University and PAHO/WHO assists in establishing the administrative structure for obtaining satisfactory hospital care for the population and for providing suitable instruction in health sciences in the National Autonomous University of Honduras.

TOTAL		12	4	-	TOTAL		457,385	14,890	-
P-4 HOSPITAL ADMINISTRATOR	PR	8	4	-	SUBTOTAL	PR	26,475	14,890	-
.4216					PERSONNEL-POSTS		24,475	13,890	-
P-4 HOSPITAL ADMINISTRATOR	PG	4	-	-	DUTY TRAVEL		2,000	1,000	-
.4216					SUBTOTAL	PG	430,910	-	-
TOTAL		20	-	-	PERSONNEL-POSTS		15,000	-	-
CONSULTANT MONTHS	PG	20	-	-	PERSONNEL-CONSULTANTS		69,191	-	-
TOTAL		290	-	-	DUTY TRAVEL		4,615	-	-
FELLOWSHIP MONTHS	PG	290	-	-	FELLOWSHIPS		202,808	-	-
					COURSE COSTS		79,296	-	-
					PROGRAM SUPPORT COSTS		60,000	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

HONDURAS-5500, MANAGEMENT OF HEALTH SERVICES

The purpose of this project is to apply the recommendations of the Secretaría de Salud Pública y Asistencia Social for the re-modeling and establishment of an administrative system and support services subsystems to improve the structure, organization and procedures in order to obtain the maximum utilization of available resources.

The objectives for the period 1977-1980 include diagnosis, improvement, design and implantation of administrative systems in the following areas: organic structure of the health system; regulation of expenses utilizing a catalog of supplies classified by categories of elements and complexity levels; organization and procedures of administration of supplies; production of medicaments by the public sector; management of the labor regime within Civil Service parameters; personnel administration procedures; costs and production of health resources; budgetary programming; accounting procedures; fiscal auditing; organization and functioning of laboratory services; and general services.

TOTAL		12	12	12	TOTAL	PR	40,360	47,585	61,185
-----		-----	-----	-----	-----	-----	-----	-----	-----
P-3 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.0830					DUTY TRAVEL		2,125	3,000	3,200
					SUPPLIES AND EQUIPMENT		-	3,735	3,150
TOTAL		6	6	17	FELLOWSHIPS		4,620	5,310	17,340
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	6	6	17					

HONDURAS-5501, IMPROVEMENT OF ADMINISTRATIVE SERVICES

The objectives of this project are: to improve the administrative and accounting procedures of the Ministry of Public Health and Social Welfare at the central level; to introduce new methods of hospital administration; and to train local personnel in technical and administrative aspects.

TOTAL		76	-	-	TOTAL	PG	407,403	-	-
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	PG	76	-	-	PERSONNEL-CONSULTANTS		266,507	-	-
					SUPPLIES AND EQUIPMENT		3,000	-	-
TOTAL		94	-	-	FELLOWSHIPS		65,896	-	-
-----		-----	-----	-----	PROGRAM SUPPORT COSTS		72,000	-	-
FELLOWSHIP MONTHS	PG	94	-	-					

HONDURAS-6200, MEDICAL EDUCATION

The purpose of this project is to cooperate with the National Autonomous University of Honduras in setting up the Department of Health Sciences and to advise on its academic and administrative organization, including the integration of teaching into the various disciplines, particularly at the basic and preclinical levels, and in the practice of medicine.

TOTAL		1	1	1	TOTAL	WR	5,010	5,655	6,460
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	WR	3	3	3					

HONDURAS-6400, SANITARY ENGINEERING EDUCATION

The purposes of this project are to cooperate with the National Autonomous University of Honduras in strengthening the teaching of sanitary engineering; to improve the technical training of personnel; to promote activities that will improve the qualifications of technical personnel, and to encourage research in sanitary engineering.

TOTAL		1	1	1	TOTAL	PR	4,450	4,750	5,150
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		350	350	350
					COURSE COSTS		1,400	1,400	1,400

HONDURAS-6900, BASIC TRAINING FOR HEALTH AUXILIARIES

The basic purpose of this project is to create an educational infrastructure that will allow the Ministry of Public Health to provide sufficient training for the personnel needed to implement the National Health Plan. In order to fill all of the demands of the National Health Plan, regular, formal courses for training different types of medium-level and auxiliary personnel must be established. The curricula must be designed on the basis of the services that these personnel are expected to provide.

TOTAL		4	4	4	TOTAL	WR	99,400	102,075	102,970
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CONSULTANT MONTHS	WR	4	4	4	PERSONNEL-CONSULTANTS		10,800	12,000	13,600
					SEMINAR COSTS		6,000	6,000	6,000
TOTAL		55	55	44	SUPPLIES AND EQUIPMENT		30,250	25,400	31,490
-----		-----	-----	-----	FELLOWSHIPS		42,350	48,675	44,880
FELLOWSHIP MONTHS	WR	55	55	44	LOCAL PERSONNEL COSTS		10,000	10,000	7,000

JAMAICA

The population of Jamaica at the end of 1975 was estimated as 2,060,300, with 43.5% under 15 years of age (1970 census). The national birth rate was 30.1 per 1,000 population, lower than that registered the previous year, and the Government's target rate, through a dynamic population policy, is 25 per 1,000 population by 1977-1978. The crude death rate is 6.2 per 1,000 population, and the infant mortality rate 23.4 per 1,000 live births. The fertility rate remained constant between 1973-1974 at 182 births per 1,000 women 15-44 years of age. The overall population increase rate was 1.61% and the net immigration rate 6.4 per 1,000 population. The Government's health budget for 1976-1977 is J\$71,511,998, which represents 7.8% of the national budget.

The principal causes of death in Kingston and St. Andrew in 1974 were accidents and violence (12.4% of all deaths), cerebrovascular diseases (12.2%), heart diseases (11.5%), neoplasms (11%), gastroenteritis and other diarrheal disorders (5.8%), pneumonia (5.5%), diabetes (4.4%), diseases of early infancy (3.5%), avitaminosis and malnutrition (1.3%), and tuberculosis (1%). The above-mentioned causes represented 66.9% of all deaths.

The Government is participating in the Caribbean Epidemiological Surveillance Program, has appointed an epidemiologist, and reviewed the system for reporting communicable diseases. Action is being taken to raise the level of immunity of the population to smallpox, polio, diphtheria, whooping cough and tetanus, typhoid fever and tuberculosis. Maternal and child health and family welfare are being greatly strengthened by the integration of the field staff of the National Family Planning Board into the Maternal and Child Health Service of the Health Ministry. New norms and procedures are being developed and studies are being conducted to strengthen the management of the program. In June 1976 the World Bank approved a US\$6.9 million loan for a second population project in Jamaica, the strengthening of the health services of Cornwall Region with special emphasis on maternal and child health and family planning and nutrition. The program includes the construction of 59 new health centers and the reconstruction of 40, the establishment of a Planning and Evaluation Unit at the central level and the strengthening of a health management information system. During 1975 services were offered through 299 antenatal clinics, 334 child health clinics and 10 new maternity centers.

The PAHO/WHO Report on Leprosy, which proposes the phased closure of the Hansen Home and the development of community facilities for domiciliary treatment, is being implemented. A community education program is in progress, and inservice training courses for doctors, nurses and sanitary inspectors were held in all the parishes. A National Food and Nutrition Policy has been developed and will be implemented with the assistance of the CFNI.

The National *Aedes aegypti* Eradication Program entered the attack phase in June 1975 in Region No. I (Kingston and St. Andrew) and in August 1975 in Region No. II (St. Catherine, St. Thomas and Portland). The rest of the country (Regions No. III and IV) is in the preparation phase, including geographic reconnaissance and mapping. Up to the end of June 1976, 365,078 houses out of a total of 429,458 houses were mapped (90%). Training activities have been completely accomplished. In April 1976 the health authorities decided to discontinue the *Aedes aegypti* Eradication Program, establishing instead a Vector Control Program with working priorities based on the epidemiological importance of each area. Malaria surveillance continues, and during 1975 five imported cases were notified and treated.

All inpatients of the Bellevue Hospital have been surveyed as a basis for their rehabilitation. WFP resources are being used to develop rehabilitation facilities, and the Government is extending the coverage of community psychiatric services. Psychiatric beds have been provided at the New Cornwall Regional General Hospital.

Dental services for school children are expanding as graduates from the Dental Nursing School (20 per year) are absorbed into the health services.

The Government is committed to improve rural water supplies, and funds for this purpose were made available in the 1975-1976 budget. Financial assistance is also being sought, and a loan of US\$7.7 million is being negotiated with IDB. A program of institutional development is being implemented at the National Water Authority, responsible for the rural water supply program, to make that agency more efficient in the delivery of its services, for the realization of the Government's goal of providing every citizen with access to potable water supply. In June 1975 the World Bank approved a loan of US\$15 million to help finance a water and sewerage project for Greater Kingston. The total cost of the scheme is J\$30 million, and its objective is to provide an additional 10 million gallons of water daily to the Kingston metropolitan area by 1980. In January 1976 IDB approved a loan of US\$12 million to help finance the cost of expansion of the water supply and sewerage system of Montego Bay and Falmouth.

A new Department of Environmental Control is being organized within the Ministry of Health and Environmental Control, which will have in the future the responsibility of conducting and coordinating all the efforts of the Government in this critical area. The preliminary activities designing the structure and scope of the new department were accomplished during 1975-1976. New programs in water and air pollution control and in occupational health are aimed at developing the country's ability to assess and monitor the environment and take corrective action when necessary.

As part of the joint program with the Ministry of Health and Environmental Control, the Ministry of Agriculture is strengthening diagnostic capacity for zoonotic diseases, especially brucellosis, bovine tuberculosis and leptospirosis. A major program to eradicate brucellosis and bovine tuberculosis is in progress, and it is proposed to improve meat and hygiene inspection. A Unit of Veterinary Public Health was created in 1975 within the Ministry of Public Health and Environmental Control.

Jamaica will be the location for the new drug testing laboratory, which will serve both Jamaica and the Caribbean region.

The field staff of the Bureau of Health Education is being strengthened by the transfer of 44 educators from the National Family Planning Board. A training program is being developed to enable this staff to function in a wider capacity.

The reorganization of the health service continues, with emphasis on the decentralization of control of the 21 general hospitals (1.6 beds per 1,000 population) and six special hospitals (2.02 beds per 1,000 population) through delegation of authority to the regional hospital boards. A new regional hospital of 400 beds was opened in 1974 and has greatly strengthened specialist care for citizens of western Jamaica. It complements the six special hospitals situated in the Kingston area. Two hundred extra beds at the Kingston Public General Hospital and 148 beds at the Victoria Jubilee Maternity Hospital will soon be available. Ten rural maternity centers with four beds each have been constructed, and entered into operation in 1975.

The Ministry of Health has prepared a paper, "Health for the Nation," which sets out the proposed health policy and in particular focuses on the Medicare (family doctor) services which aim to bring adequate care to all through an insurance scheme. A document "Basic Health Policies" has been prepared as the first step in the development of the health planning process in the country. In the interim there is continued effort to encourage the participation of the medical profession and to increase efficiency through better clinic facilities and improving maintenance, supplies of drugs and equipment, and health records and statistical systems.

Mental health, maternal and child health, family planning and nutrition, environmental control and development of health manpower are priority areas for the Government. Health care facilities maintenance, venereal disease control and chronic disease control (diabetes) are foreseen as priority areas for the immediate future.

The lack of health personnel is a major constraint for the development of adequate health services in the country. There is an uneven distribution of doctors between urban and rural areas, with ratios as low as 0.6 per 10,000 population, compared with the national average of 2.6. The Government is concerned both with improving these ratios and with improving the effective utilization of doctors and other personnel. It is providing a comprehensive postgraduate program for physicians to counteract the "brain-drain" of those who formerly sought such training abroad. It is proposed to provide extended specialist training for suitable nurses so that they can function as nurse practitioners; nurse anesthetists have already been trained. The fullest utilization of potentially trained auxiliaries is being explored and a national training program, with a target of preparing 2,200 community aides by 1980, is in progress. By mid-1976, 800 community aides had been trained.

The shortage of dental officers, specially for the school dental services, led to the establishment of a Dental Auxiliary Training School with an annual output of 20 dental nurses. A School of Physiotherapy was established in 1972 with the first 26 students graduating in 1975-1976.

The well-established West Indies School of Public Health continues to prepare public health doctors, nurses and inspectors for Jamaica and the English-speaking Caribbean.

At the College of Arts, Science and Technology, courses are now being offered in pharmacy and medical technology. In August 1976 the training course for intermediate personnel in health records and statistics, with 18 students, was completed. A new course for 17 students starts in September and it is expected that more advanced, second-year training will be available for senior positions in the health statistics system from 1977. Ten radiographers are trained annually for the Caribbean area at the University Hospital.

In 1976, 17 animal health assistants were given six months inservice training, and 16 persons attended a four-week course in veterinary public health for chief and senior public health inspectors. The Government supports the establishment of the regional course in Guyana but will continue to provide local courses in the interim.

A comprehensive program for the training of environmental health personnel for ministries and agencies is envisaged; meanwhile short courses have been conducted at the West Indies School of Public Health and at the College of Arts, Science and Technology. Courses in "Fundamental Principles in Maintenance and Water Supply Systems" and "Occupational Health" were conducted in 1976.

A Health Facilities Maintenance Division was formed to coordinate the activities of the Ministries of Health and Works. Two zone offices have been established in Montego Bay and Kingston. A system of management has been developed, and norms and procedures are being formulated for preventive maintenance at the new Cornwall Regional Hospital and will be introduced into the other hospitals. New procedures for maintenance have been implemented, and inventory systems are being introduced. Supervisors are being trained.

Early attention will be given to the enactment of modern mental health legislation.

JAMAICA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	455,215	63.8	383,565	60.2	362,960	58.2
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	71,675	10.1	120,140	18.9	127,895	20.5
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COMMUNICABLE DISEASES						
0700 AEDES AEGYPTI-BORNE DISEASES	17,700	2.5	35,500	5.6	37,800	6.1
1500 MENTAL HEALTH	53,975	7.6	84,640	13.3	90,095	14.4
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ENVIRONMENTAL HEALTH SERVICES	317,475	44.4	198,070	31.0	167,205	26.8
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	54,145	7.6	58,910	9.3	66,925	10.7
2100 WATER SUPPLY AND EXCRETA DISPOSAL	93,120	13.0	-	-	-	-
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	5,010	.7	5,655	.9	14,620	2.3
3300 ZOOZOSES	150,500	21.0	119,850	18.7	75,200	12.1
3600 QUALITY CONTROL OF DRUGS	14,700	2.1	13,655	2.1	10,460	1.7
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COMPLEMENTARY SERVICES	66,065	9.3	65,355	10.3	67,860	10.9
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4300 EPIDEMIOLOGICAL SURVEILLANCE	32,665	4.6	50,700	8.0	51,200	8.2
4500 REHABILITATION	33,400	4.7	14,655	2.3	16,660	2.7
-----	-----	-----	-----	-----	-----	-----
II. DEVELOPMENT OF THE INFRASTRUCTURE	258,855	36.2	253,040	39.8	260,830	41.8
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	174,365	24.4	193,800	30.5	232,960	37.4
-----	-----	-----	-----	-----	-----	-----
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	106,830	14.9	117,215	18.4	145,445	23.4
5100 GENERAL PUBLIC HEALTH SYSTEMS	-	-	3,000	.5	13,940	2.2
5200 MEDICAL CARE SYSTEMS	10,410	1.5	8,655	1.4	9,860	1.6
5400 STATISTICS AND INFORMATION SYSTEMS	11,800	1.7	16,735	2.6	11,860	1.9
5500 MANAGEMENT SYSTEMS	45,325	6.3	48,195	7.6	51,855	8.3
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DEVELOPMENT OF HUMAN RESOURCES	8,600	1.2	12,740	2.0	27,870	4.4
-----	-----	-----	-----	-----	-----	-----
6400 ENVIRONMENTAL SCIENCES	3,700	.5	7,540	1.2	18,870	3.0
6600 DENTISTRY	4,900	.7	5,200	.8	9,000	1.4
-----	-----	-----	-----	-----	-----	-----
PHYSICAL RESOURCES	75,890	10.6	46,500	7.3	-	-
-----	-----	-----	-----	-----	-----	-----
7400 MAINTENANCE OF HEALTH CARE FACILITIES	75,890	10.6	46,500	7.3	-	-
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GRAND TOTAL	714,070	100.0	636,605	100.0	623,790	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

[illegible]

JAMAICA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			400	53,285	400	61,745	400	66,070
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			10	1,905	10	2,020	10	2,140
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			37	5,575	37	6,015	37	6,475
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			48	3,750	48	5,945	48	6,310
	Nurse	0.0887	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			26	3,700	26	4,005	26	4,315
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			62	7,850	62	8,405	62	8,945
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			21	2,600	21	2,785	21	2,965
	Statistician	0.0841	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			44	4,810	44	5,170	44	5,515
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			114	32,685	108	25,000	108	25,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	<u>Total All Programs</u>			795	135,760	789	144,570	789	152,555
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

JAMAICA - DETAIL

JAMAICA-0700, Aedes Aegypti ERADICATION

The purpose of this project is to assist the Government in undertaking a national program to eradicate the Aedes aegypti mosquito from the country.

PAHO/WHO has been providing continuing technical assistance in the training of all the personnel at different levels and in the execution of the program, including monitoring of techniques and insecticide effectiveness. Due to the drastic reduction in the budget provision and conditions prevailing in the working environment, the Ministry of Health and Environmental Control has adopted a modified eradication program. With this change in the plan of work, the eradication of Aedes aegypti may take six years instead of three. A scheme for islandwide vector control has been proposed (including Aedes aegypti), and technical assistance will be required in different areas.

TOTAL		6	12	12	TOTAL	WR	17,700	35,500	37,800
-----		-----	-----	-----	-----		-----	-----	-----
P-2 SANITARIAN	WR	6	12	12	PERSONNEL-POSTS		15,200	32,500	34,800
4.4481					DUTY TRAVEL		2,500	3,000	3,000

JAMAICA-1500, MENTAL HEALTH

The objectives of this project are to provide assistance in planning for comprehensive total care for the patient by utilization of available resources and personnel; to plan and implement educational programs and training for the mental health team members, health personnel and personnel of other disciplines; and to coordinate activities and functions between the various professional disciplines and community organizations.

Specifically, technical assistance will be rendered to the Government in establishing health policies in the area of mental health; inservice and continuing education programs will be implemented for the various levels of health personnel to ensure improved care of the patient; and assistance will be given to increase the number of health personnel manpower available to meet changing needs and demands. These objectives and activities will be coordinated with the national counterparts employed by the Government.

TOTAL		24	24	24	TOTAL		53,975	84,640	90,095
-----		-----	-----	-----	-----		-----	-----	-----
P-4 MEDICAL OFFICER	WR	12	12	12	SUBTOTAL	PR	23,810	36,940	38,895
4.2154									
P-3 NURSE	PR	12	12	12	PERSONNEL-POSTS		22,410	35,540	37,495
.2192					DUTY TRAVEL		1,400	1,400	1,400
					SUBTOTAL	WR	30,165	47,700	51,200
					PERSONNEL-POSTS		28,665	46,200	49,700
					DUTY TRAVEL		1,500	1,500	1,500

JAMAICA-2000, WATER SUPPLIES AND ENVIRONMENTAL SANITATION

The country's capability to monitor the total environment and implement programs in water and air pollution control, occupational health and industrial waste management needs to be developed. The Division of Environmental Control was created in 1975 to undertake these functions, and this project aims to support and strengthen this Division in its endeavor to provide adequate environmental control. The project also provides for coordination between various agencies in the supervision of water supplies management and manpower development.

TOTAL		12	12	12	TOTAL	PR	54,145	58,910	66,925
-----		-----	-----	-----	-----		-----	-----	-----
P-4 SANITARY ENGINEER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.0960					PERSONNEL-CONSULTANTS		2,700	3,000	6,800
					DUTY TRAVEL		2,500	2,500	2,500
TOTAL		1	1	2	SUPPLIES AND EQUIPMENT		1,000	2,000	2,500
-----		-----	-----	-----	FELLOWSHIPS		8,470	9,735	11,220
CONSULTANT MONTHS	PR	1	1	2					
TOTAL		11	11	11					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	11	11	11					

JAMAICA-2100, WATER AND SEWER ADMINISTRATION

The purpose of this project is to assist the National Water Authority in developing its capability to meet its legal, institutional, financial, engineering and coverage objectives in order to provide an efficient, effective and viable island-wide water, sewerage and irrigation service.

The immediate objectives of the project are to investigate and develop managerial systems relating to basic organization, but more specifically to the areas concerned with planning, organizing and controlling the responsibilities of the Authority; to streamline existing systems and to develop new systems relating to administrative services concerned with personnel, supply, management organization and methods; to develop accounting systems for water utility operation which include both capital and recurrent expenditures, and to establish criteria relating to the internal audit of water utilities financing; and to evaluate the technical staff requirements to ensure that the Authority can effectively operate its plants, and to design the necessary systems and supervise their construction.

		FUND	1977	1978	1979			FUND	1977	1978	1979
		----	-----	-----	-----			----	-----	-----	-----
			\$						\$		\$
TOTAL			4	-	-	TOTAL		PW	28,120	-	-
P-4	PROJECT MANAGER	PW	4	-	-	PERSONNEL-POSTS			14,000	-	-
	.4212					PERSONNEL-CONSULTANTS			7,000	-	-
						DUTY TRAVEL			1,000	-	-
TOTAL			3	-	-	SUPPLIES AND EQUIPMENT			2,000	-	-
			-----	-----	-----	FELLOWSHIPS			4,120	-	-
	CONSULTANT MONTHS	PW	3	-	-						
TOTAL			5	-	-						
			-----	-----	-----						
	FELLOWSHIP MONTHS	PW	5	-	-						

FUND				FUND			
1977 1978 1979				1977 1978 1979			
-----				-----			

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

JAMAICA-5100, DEVELOPMENT OF HEALTH SERVICES

Health planning as a process of change and as a means to rationalize the utilization of scarce resources has not yet been incorporated into the system in an institutionalized form. The lack of adequate health personnel and its uneven distribution is a major constraint for the development of health services in the country.

The objectives of this project are to assist the Government in the establishment of a national health planning process within the framework of the general socioeconomic development of the country and with particular emphasis on the extension of coverage of primary health services, interrelated with levels of care and full community participation; to assist the Ministry of Health and Environmental Control in the establishment of a national program for environmental control, including veterinary public health; and to assist the Government in conducting a training program for personnel at the central, regional and local levels in planning and management of the health services.

TOTAL		-	1	2	TOTAL	PR	-	3,000	13,940
CONSULTANT MONTHS	PR	-	1	2	PERSONNEL-CONSULTANTS	-	3,000	6,800	
FELLOWSHIPS		-	-	7		-	-	7,140	
TOTAL		-	-	7					
FELLOWSHIP MONTHS	PR	-	-	7					

JAMAICA-5200, MEDICAL CARE AND HOSPITAL ADMINISTRATION

The introduction of a health care system based on curative and preventive medicine and social security integrated into one scheme is being considered. This program not only implies wider coverage of the population in terms of provision of health services, but involves the decentralization of authority to the regional hospital boards to enable them to have a greater control over the management of their services. This will require more trained health managers, a more efficient and relevant information system, particularly in medical records, the establishment of an efficient system for the maintenance of health facilities, and the development of sound administrative systems within the health units.

The specific objectives of this project are to continue and to extend the guidance and assistance provided to the Ministries of Health and Works in the organizing, staffing and functioning of an adequate health facilities maintenance unit; to assist the Ministry of Health and Environmental Control in drafting a scheme of medicare in Cornwall County and assist in its implementation; to introduce and follow up on the use of personnel, supply and maintenance systems at selected Government hospitals; to strengthen the medical records systems in Government hospitals; and to assist in developing an efficient and effective system of hospital administration with emphasis on training of administrators, in keeping with the Government medicare program.

TOTAL		3	2	2	TOTAL	WR	10,410	8,655	9,860
CONSULTANT MONTHS	WR	3	2	2	PERSONNEL-CONSULTANTS	8,100	6,000	6,800	
FELLOWSHIPS		3	3	3		2,310	2,655	3,060	
TOTAL		3	3	3					
FELLOWSHIP MONTHS	WR	3	3	3					

JAMAICA-5401, BIOSTATISTICS EDUCATION

The lack of trained personnel in medical records and health statistics has placed a major constraint on the development of a health service information system.

The purpose of this project is to assist the local authorities in the ongoing training program at the College of Arts, Science and Technology, which is qualified to offer recognized certificates and diplomas to students who have successfully achieved the academic requirements. With the development of this training program a graded career structure will also arise. In addition, it is planned to develop short-term training programs for medical records staff in the field, which would permit decentralization of training while ensuring uniformity of content.

The development of middle management personnel in medical records departments and regional training officers will make it possible to withdraw permanent technical assistance from the region. Hospital standards can be established which can be measured by adequately documented medical records.

TOTAL		4	2	2	TOTAL	PR	11,800	16,735	11,860
CONSULTANT MONTHS	PR	4	2	2	PERSONNEL-CONSULTANTS	10,800	6,000	6,800	
FELLOWSHIPS		-	11	3	SUPPLIES AND EQUIPMENT	1,000	1,000	2,000	
TOTAL		-	11	3	FELLOWSHIPS	-	9,735	3,060	
FELLOWSHIP MONTHS	PR	-	11	3					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

JAMAICA-5500, MANAGEMENT OF HEALTH SERVICES

The objectives of this project are to identify the management needs of the Ministry of Health and Environmental Control; to assist in the development of a new organization structure and system of management in keeping with these needs; to analyze the existing administrative support services of the Ministry, and help to develop and implement a program for their improvement.

The main focus is on the role and function of the head office of the Ministry of Health and Environmental Control, as well as on the management system for the health services within the County of Cornwall and Kingston Hospital Region. Emphasis will be placed on the planning and evaluation of health services, the development of health policies, and the improvement of the administrative support services in supplies, budget and accounting and personnel management.

PAHO/WHO collaborates with the Government through consultant services in the analysis, design and implementation of the management systems and training programs.

TOTAL		12	12	12	TOTAL	PR	45,325	48,195	51,855
P-3 ADMIN. METHODS OFFICER .2056	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		4,000	4,000	4,500
TOTAL		2	2	2	FELLOWSHIPS		2,310	2,655	3,060
CONSULTANT MONTHS	PR	2	2	2					
TOTAL		3	3	3					
FELLOWSHIP MONTHS	PR	3	3	3					

JAMAICA-6400, SANITARY ENGINEERING EDUCATION

The purpose of this project is to assist the Government to alleviate the shortage of personnel in the field of water and environmental health through a series of short courses. The project also aims to institutionalize training programs in environmental health at the West Indies School of Public Health and at the College of Arts, Science and Technology (CAST). The objectives of the project have been widened in scope to incorporate the development of a national program of training for water personnel and the development of a water technical school at CAST. The implementation of this part of the project depends on the availability of external funding.

TOTAL		1	1	1	TOTAL	WR	3,700	7,540	18,870
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		-	4	11	FELLOWSHIPS		-	3,540	11,220
FELLOWSHIP MONTHS	WR	-	4	11	GRANTS		1,000	1,000	4,250

JAMAICA-6600, DENTAL AUXILIARY PROGRAM

The purposes of this project are to develop within the Ministry of Health an efficient management system to ensure the efficient and effective delivery of dental health services; strengthen the program for the production of trained auxiliaries, including dental nurses and dental assistants, who would be able to provide improved dental service to school children; and establish a program for the training of dental professionals.

TOTAL		12	12	12	TOTAL	PR	4,900	5,200	9,000
P-4 DENTAL OFFICER .4542	PR	12	12	12	PERSONNEL-POSTS		-	-	-
					PERSONNEL-CONSULTANTS		2,700	3,000	6,800
TOTAL		1	1	2	DUTY TRAVEL		1,500	1,500	1,500
CONSULTANT MONTHS	PR	1	1	2	COURSE COSTS		700	700	700

JAMAICA-7400, HEALTH CARE FACILITIES MAINTENANCE

The purpose of this project is to place in operation an effective and efficient maintenance system of health care facilities. The short-range objectives are: to introduce systematic techniques in the management of equipment and building maintenance; and to improve the administration and supervision of maintenance personnel for the purpose of increasing productivity.

TOTAL		12	12	-	TOTAL	UNDP	75,890	46,500	-
P-5 PROJECT MANAGER 4.4871	UNDP	12	12	-	PERSONNEL-POSTS		51,000	46,500	-
					PERSONNEL-CONSULTANTS		8,800	-	-
TOTAL		3	-	-	DUTY TRAVEL		1,800	-	-
CONSULTANT MONTHS	UNDP	3	-	-	SUPPLIES AND EQUIPMENT		4,000	-	-
TOTAL		13	-	-	FELLOWSHIPS		9,690	-	-
FELLOWSHIP MONTHS	UNDP	13	-	-	MISCELLANEOUS COSTS		600	-	-

MEXICO

The United States of Mexico has an area of 1,967,183 km². According to the 1970 census, it has 48,318,547 inhabitants; the estimated population in 1975 was 60,145,258, of which 46.2% were under 15 years of age. The annual rate of population growth is 3.5%. In 1975, the per capita income was M\$8,845 (US\$681.00). The economically active population represents 43.6% of the population over 12 years of age; 50.0% of the economically active population are employed in the primary sector, which contributes 11.6% of the gross national product; 22.0% are employed in the secondary sector, which contributes 34.2%; and 28.0% are employed in the tertiary sector, which contributes 54.2%.

Mexico's economic and social development policy gives priority to industrial and agricultural development, social development, and the development of transportation and communications. This policy is reflected in the national budget for 1976 which totals M\$392,399 million, 69.0% more than the 1974 budget. The 1976 budget is broken down as follows: 32.0% for the industrial sector; 22.8% for the social sector; 18.6% for administration and defense; 14.4% for the agricultural sector; 11.9% for transportation and communications; and 0.3% for tourism.

The health situation in Mexico has improved considerably in the last decade. In 1974, life expectancy at birth was estimated at 62.4 years for males and 67.4 years for females. The principal causes of morbidity and mortality are acute infectious diseases: gastrointestinal diseases and diseases of the respiratory system, especially in the rural areas and in the suburbs. Malnutrition continues to be a problem which primarily affects the child population.

Health care of the population is the responsibility of the State through the Secretariat of State for Health and Welfare (SSA). Assistance in preventive care is provided through the services of this Secretariat, through the Mexican Social Security Institute (IMSS), the Institute of Social Security and Social Services for State Employees (ISSSTE), and through other autonomous and private agencies. SSA, which has policy-making, coordinating and executive functions, consists of three Subsecretariats - Health, Welfare and Environmental Improvement. Health activities for the benefit of the population of the states are carried out through the Coordinated Public Health Services, which operate under agreements between the Secretariat and the governments of the states. The Coordinated Services operate under the direction of the Secretariat. In February 1973 the new Health Code of the United States of Mexico was approved by presidential decree.

In 1974, communicable diseases accounted for 38.5% of all recorded deaths; foremost among them were acute infectious diseases, gastrointestinal diseases, and diseases of the respiratory system. Measles, whooping cough, tetanus, diphtheria, tuberculosis and poliomyelitis accounted for 3.7% of the total. SSA assigned high priority to the immunization program, which has succeeded in recent years, as a result of mass programs, in reducing the proportion of susceptible population. In 1974, the program was conducted for the first time on the basis of simultaneous immunizations. The National Tuberculosis Campaign has been completely integrated with the National Health Services.

The attack phase of the malaria eradication program began in 1957; in 1961, 74% of the malarious area was shifted into the consolidation phase. The imbalance caused by the suspension of the UNICEF contribution led to a gradual deterioration of the situation until 1971, when the national budget was substantially increased and total coverage was achieved. In 1972-1973, the epidemiological situation improved markedly, especially in the Gulf of Mexico area. The budgetary increases required in the years ahead, which are assured by the priority the Government has assigned to the program, will make it possible to improve the situation still further and to undertake the research needed in areas where malaria is refractory. Infestation by *Aedes aegypti* is spreading south from the border with the United States of America as far as Tampico and Ciudad Victoria. Recently, resistance of this vector to DDT has been confirmed. In southern Mexico there are isolated foci of onchocerciasis and Chagas' disease.

Rabies is endemic in the urban and rural areas and has caused an annual average of 80 human deaths, the result of a high incidence of animal bites. There is a continuing rabies control program in northern Mexico and in the Federal District. Brucellosis is a serious problem and a program for the eradication of this zoonosis, based on the voluntary participation of stockraisers, is in operation. Bovine tuberculosis seems to be another problem, and the national authorities have stepped up activities with a view to achieving greater control of the disease.

Maternal and child health is a high priority in Mexico since reducing maternal and child morbidity and mortality rates is considered feasible. In 1974, 36.5% of total deaths occurred among children under five years of age. In that same year, infant mortality was 48.2 per 1,000 live births; mortality among preschool-age children was 4.8 per 1,000 children in this age group. SSA intends to strengthen maternal and child health programs, which are, moreover, the core of other health and medical care activities. A national maternal and child health and family planning program was designed and put into effect in 1973, with international assistance.

In the field of population dynamics, the various demographic and standard of living indicators in Mexico point to a critical area which is beginning to receive attention from the national authorities. The country has a high rate of natural population growth accompanied by a very high birth rate; a large rural and scattered population; unsatisfactory social and economic conditions; a high incidence of abortion; low educational levels; and an inadequate supply of services, especially for the rural population. All these factors justify the implementation of family planning and welfare programs, with couples being given complete freedom to decide on the size of their families. Aware of the overriding importance of this problem, in 1974 the Government promulgated the General Population Law and gave wide support to the policy of the SSA on maternal and child health, family planning and responsible parenthood.

Malnutrition is a problem that affects the Mexican population, especially children in rural areas. As a national average, in 1974 the food supply provided 2,600 calories per inhabitant/day and 80 grams of protein per inhabitant/day (25.8 from animal sources). The food supply is somewhat less in the rural areas where, in addition, a good proportion of it is of vegetable origin. Nutrition education programs and food supplementation programs are being carried out for the vulnerable sectors of the population (mothers and children). The problems of dental health in the rural areas have not yet been quantified.

Cancer and the other chronic diseases occupy a relatively important place in the health activities carried out in the urban areas, but there are few resources available to deal with these diseases at the rural level. Among the 10 principal causes of death in 1974, cancer dropped to fourth place, and accidents rose to third.

Environmental sanitation programs, especially water supply programs, have been continued. As a result, water-borne diseases have been reduced, and recently programs for the sanitary disposal of solid waste and for housing sanitation have been intensified in order to reduce morbidity caused by diarrheal diseases, salmonellosis, intestinal parasitic diseases, and certain diseases of the respiratory system, which are among the principal causes of disease and death in Mexico. Air pollution has increased in urban areas that have a high population density and are industrialized. The disposal of solid waste and the wide use of pesticides are a potential threat to the maintenance of the ecological balance of the environment and also cause the pollution of ground water. Of the estimated urban population for 1973 of 36,669,939 inhabitants, 72% had inhouse water connections and 49% had sewage disposal services. Of the rural population in 1973, estimated at 20,925,000 inhabitants, 33% had water supply services and less than 1% had sewage disposal services.

To deal with the problems of pollution, the Government established in 1972 the Subsecretariat for the Improvement of the Environment within the Office of the SSA. In 1971, the Federal Law on the Prevention and Control of Environmental Pollution had already been promulgated, as had the Regulation for the Prevention and Control of Air Pollution Caused by the Emission of Fumes and Dust; in 1972 the new Federal Water Law was promulgated. In 1973 the Regulations for the Prevention and Control of Water Pollution were published. The Subsecretariat for the Improvement of the Environment has drawn up a program for the next four years which involves a substantial national contribution and also a contribution from UNDP. Regional development, industrial decentralization and the social development of the rural and marginal populations are the basic aims of the present administration's policy. Various regional development projects are in the execution or programming phase, and the health sector has an important role in these programs. SSA has formulated policies for dealing with the rural environment and the marginal areas of towns. For example, the Health Plan for the State of Chiapas and the Program for the Chiapas Highlands, which are supported by international assistance (UNICEF, FAO, UNESCO, UNDP and PAHO/WHO), are now in an advanced stage.

The health authorities are working out a program for extending medical and sanitation programs to the rural areas. The program is reinforced by another project designed to employ adolescents and young people in community work and in health houses.

The control of the quality of foodstuffs and medicines is a source of concern to the health authorities. A specialized center was established in Mexico City in 1973-1974 to modernize the control of drugs, especially antibiotics.

The administration of the nursing services gives rise to problems of organization and operation, technical standards and personnel policy, as well as the problem of training nursing personnel. These acquire particular importance in the interior of the country.

SSA considers it essential to modernize the system of health laboratories in the fields of diagnosis, production, control and research. There are various projects for the strengthening of laboratories and for the preparation of biologicals which are receiving international assistance. The production of oral poliomyelitis vaccine is at a very advanced stage. A central reference laboratory is being organized and a laboratory specializing in enteric diseases is already established. SSA is planning the establishment of five diagnostic and reference laboratories.

There are many persons in need of physical, mental and social rehabilitation. Although there are a large number of rehabilitation centers and programs, the authorities consider the present services insufficient to meet the demand. SSA intends to expand integral rehabilitation programs.

The coverage of medical care programs available to the Mexican population needs to be increased, since it is very difficult for the scattered rural population to gain access to them. For this reason, SSA considers it essential to expand them by the efficient use of all the preventive and curative resources of the various institutions of the health sector. This sector comprises the SSA, the IMSS, the ISSSTE, and a variety of institutions designed to provide health care to minority groups. However, it has so far not been possible to offer the rural population adequate medical care services. In this regard, it is believed that appropriate interinstitutional coordination, which will make it possible to harmonize the common objectives, together with the enactment of legal provisions and regulations and an increase in the funds appropriated, will result in a substantial improvement of the present situation.

In 1971, the health planning process was initiated with the establishment of the Planning and Evaluation Department within the General Coordinated Public Health Services Administration and with the establishment of planning offices in each of the Offices of Coordinated Services in the federal departments. The First National Health Convention was held in 1973. It laid the foundations for the formulation of the National Health Plan, which will be followed by the preparation of state health plans. As a result of the Convention, in August 1974 the National Health Plan was presented. The urban and semiurban populations in general are adequately served by the institutions mentioned. The real problem is the rural population, of which it is estimated that from 15 to 20 million have difficulty in gaining access to medical care.

There are insufficient medical care resources, and their poor distribution is partly a reflection of the scattered nature of the population. For the same reason, human resources are in short supply because they are concentrated in the urban areas. The availability of hospital beds per 1,000 inhabitants is as follows: private sector, 4.5 beds; Social Security, 2.2 beds; and SSA, 1.2 beds in its areas of jurisdiction, some areas having less of 0.5 beds per 1,000 inhabitants. In 1973, out of a total of 64,727 beds, 34% were available to social security institutions to cover one-fourth of the population, 27% to SSA to cover two-thirds, and 13% to other public agencies, with the remainder in the private sector.

It is proposed to deal with this problem by proper coordination between official, decentralized and private institutions, by the organization of a national hospital system, and by the establishment of new units to ensure their operation and maintenance. For the rural population, a system of health houses has been established, manned by auxiliary personnel under the immediate supervision of the rural health centers. In 1976, there are 2,250 functioning health houses, and 710 rural communities have the services of what are known as community physicians. IMSS is carrying out a program of social solidarity for peasants.

The human resources available in the health sector cover only partially the needs of the country. There is a high concentration of human resources in the urban areas, a circumstance responsible for the lack of care in the rural areas. However, this problem is being partially overcome with the increasing expansion of the communications network. The new National Health Plan envisages national planning for the training of human resources. The development of projects in individual states has resulted in a proliferation of centers for higher education in the health sector, especially medicine. Mexico has 47 medical schools, 20 dental schools, 15 schools of veterinary medicine, one school of public health, and 113 nursing schools. Four interdisciplinary centers for health sciences have been established, and a number of universities plan to establish interdisciplinary centers, integrating the different faculties which deal with health subjects. The Latin American Center for Educational Technology in Health is operating in Mexico. Its purpose is to promote the further development of health manpower through the training of teachers, the improvement of curricula and teaching methods, and better educational administration. IMSS, ISSSTE, and the various agencies of SSA are conducting a broad program of graduate courses in different health specialties.

According to 1975 data, the situation as regards human resources in the health sector, with ratio per 10,000 population, was as follows: physicians, 7.9; dentists, 1.4; veterinarians, 1.9; sanitary engineers, 0.1; nurses, 2.7; and intermediate-level personnel and nursing auxiliaries, 12.2. The above ratios only partially reflect the true situation since health resources are concentrated in the urban areas. The production of these resources, especially physicians and dentists, is increasing. However, although the situation is improving, it cannot be considered fully satisfactory until the defects in the distribution and utilization of health manpower are corrected.

An integral plan for the reorganization of veterinary medicine education, with adequate resources, was initiated in 1973 and is continuing to be developed. A number of individual Mexican states are implementing programs for the training of health technicians and auxiliaries and, in particular, have created opportunities for technical education in the health sector, in pursuance of the aims of the country's educational reform policy.

MEXICO
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	2,794,080	82.3	2,154,239	82.4	1,790,491	77.7
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	2,042,217	60.0	1,809,702	69.3	1,492,401	64.7
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COMMUNICABLE DISEASES						
0200 MALARIA	126,330	3.7	130,750	5.0	91,160	4.0
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	1,901,280	55.9	1,626,967	62.3	1,343,916	58.2
1600 DENTAL HEALTH	14,607	.4	51,985	2.0	57,325	2.5
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ENVIRONMENTAL HEALTH SERVICES	682,448	20.2	279,717	10.6	191,485	8.4
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	28,080	.8	29,995	1.1	31,155	1.4
2100 WATER SUPPLY AND EXCRETA DISPOSAL	208,774	6.2	155,292	5.9	62,725	2.7
ENVIRONMENTAL POLLUTION						
2300 PROGRAM PLANNING AND GENERAL ACTIVITIES	294,200	8.7	5,655	.2	6,460	.3
3300 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
ZOOSES	151,394	4.5	88,775	3.4	91,145	4.0
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COMPLEMENTARY SERVICES	69,415	2.1	64,820	2.5	106,605	4.6
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4100 NURSING	-	-	-	-	22,665	1.0
4400 HEALTH EDUCATION	9,775	.3	-	-	-	-
4500 REHABILITATION	59,640	1.8	64,820	2.5	83,940	3.6
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II. DEVELOPMENT OF THE INFRASTRUCTURE	598,112	17.7	459,660	17.6	515,927	22.3
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HEALTH SYSTEMS	217,835	6.4	223,680	8.6	287,807	12.5
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5100 GENERAL PUBLIC HEALTH SYSTEMS	217,835	6.4	223,680	8.6	287,807	12.5
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DEVELOPMENT OF HUMAN RESOURCES	200,969	6.0	197,970	7.5	190,280	8.2
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6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	107,465	3.2	110,420	4.2	120,945	5.2
6300 NURSING	47,184	1.4	40,040	1.5	42,895	1.9
6400 ENVIRONMENTAL SCIENCES	22,020	.6	23,310	.9	16,920	.7
6500 VETERINARY MEDICINE	16,790	.6	18,045	.7	9,520	.4
6900 OTHER	5,510	.2	6,155	.2	-	-
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PHYSICAL RESOURCES	42,600	1.3	-	-	-	-
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TECHNOLOGICAL RESOURCES	136,708	4.0	38,010	1.5	37,840	1.6
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TEXTBOOKS AND OTHER TEACHING MATERIALS						
8400 OTHER	4,378	.1	-	-	-	-
8700 OTHER TECHNOLOGICAL RESOURCES	132,330	3.9	38,010	1.5	37,840	1.6
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GRAND TOTAL	3,392,192	100.0	2,613,899	100.0	2,306,418	100.0
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*LESS THAN .05 PERCENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER	
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS					AMOUNT

1977	\$				\$		\$	\$	\$	\$	\$	
PAHO---PR	523,080	96	-	13	391,075	22,400	33	25,410	4,375	49,800	22,500	7,520
PW	150,969	24	-	25	141,321	1,000	-	-	-	8,648	-	-
PG	112,678	4	-	1	14,294	6,139	-	-	-	18,594	-	73,651
PH	106,580	-	-	5	34,671	3,253	-	-	-	33,577	-	35,079
WHO---WR	288,130	24	-	17	117,565	3,500	150	115,500	21,500	15,515	8,000	6,550
UNDP	299,700	8	-	28	131,280	-	57	44,000	-	104,423	20,000	-
WO	9,775	2	-	-	9,430	345	-	-	-	-	-	-
UNFPA	1,901,280	24	12	1	86,475	5,000	8	6,180	443,825	411,000	-	948,600
TOTAL	3,392,192	182	12	90	926,111	41,637	248	191,090	469,700	641,554	50,500	1,071,600
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PCT. OF TOTAL	100.0				27.3	1.2		5.6	13.9	18.9	1.5	31.6
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1978												
PAHO---PR	648,400	96	-	13	451,315	25,900	73	64,605	15,075	59,665	24,500	7,340
PW	93,352	24	-	-	92,352	1,000	-	-	-	-	-	-
WHO---WR	245,180	24	-	9	119,400	3,500	113	100,005	10,500	4,300	-	7,475
UNFPA	1,626,967	24	12	2	94,300	5,500	8	6,810	268,830	483,921	-	767,600
TOTAL	2,613,899	168	12	24	757,367	35,900	194	171,420	294,405	547,892	24,500	782,415
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
PCT. OF TOTAL	100.0				29.0	1.4		6.6	11.3	20.9	.9	29.9
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1979												
PAHO---PR	695,652	96	-	12	453,717	26,100	114	116,280	12,055	57,025	22,500	7,975
WHO---WR	266,850	24	-	12	140,200	3,780	102	104,040	6,500	4,430	-	7,900
UNFPA	1,343,916	12	6	1	48,543	4,000	22	22,340	263,620	399,307	-	606,106
TOTAL	2,306,418	132	6	25	642,460	33,880	238	242,660	282,175	460,762	22,500	621,981
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
PCT. OF TOTAL	100.0				27.9	1.5		10.5	12.2	20.0	1.0	26.9
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PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION						PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS						

MEXICO
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA II CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA II (PR)	<u>Program Planning and General Activities</u>			180	61,880	180	72,005	180	78,625
	Area Representative	0.0273	D-1						
	Administrative Officer	0.4721	P-3						
AMRO-1320 (PR)	<u>Maternal and Child Health and Family Welfare</u>			252	27,630	252	29,170	252	30,735
	Medical Officer	0.0027	P-4						
AMRO-2020 (WR)	<u>Environmental Health Services</u>			162	23,900	162	25,645	144	24,590
	Sanitary Engineer	4.0864	P-5						
AMRO-3120 (PR)	<u>Animal Health and Veterinary Public Health</u>			90	12,945	90	13,695	90	14,450
	Veterinarian	0.3218	P-4						
AMRO-4120 (PR)	<u>Nursing</u>			90	10,210	90	14,285	90	15,090
	Nurse	0.0889	P-4						
AMRO-5220 (PR)	<u>Medical Care Systems</u>			90	10,915	90	11,520	90	12,125
	Hospital Administrator	0.2188	P-4						
AMRO-5320 (WR)	<u>Health Systems - Planning</u>			90	12,065	90	12,930	90	13,860
	Health Planner	4.3674	P-4						
AMRO-5420 (WR)	<u>Statistics and Information Systems</u>			90	13,905	90	14,855	90	15,920
	Statistician	4.0839	P-4						
	<u>Total All Programs</u>			1,044	173,450	1,044	194,105	1,026	205,395

* The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

MEXICO - DETAIL

MEXICO-0200, MALARIA ERADICATION

The objectives of this project are to increase operations nationwide for the eradication of malaria; to continue sprayings with DDT in the attack phase area; to take a sufficient number of blood samples to monitor the disease; and to maintain the network of observation posts.

TOTAL		24	24	12	TOTAL	PR	126,330	130,750	91,160
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		78,950	81,350	43,905
.0529					DUTY TRAVEL		4,200	4,300	2,500
P-4 SANITARY ENGINEER	PR	12	12	-	SUPPLIES AND EQUIPMENT		43,180	43,100	44,755
.0532									

MEXICO-1300, FAMILY HEALTH AND POPULATION DYNAMICS

This project provides support for the family planning program of the General Directorate of Maternal and Child Care, which is an integral part of the maternal and child health program of the Ministry of Health and Welfare. Its immediate objectives are to strengthen the infrastructure of the Ministry to enable it to carry out its maternal and child health and family planning program; to train the necessary manpower; to promote a demand for services; and to provide services in all its health units.

TOTAL		36	36	18	TOTAL	UNFPA	1,901,280	1,626,967	1,342,916
P-4 ADMINISTRATIVE OFFICER	UNFPA	12	12	6	PERSONNEL-POSTS		82,475	86,300	44,543
4.4427					PERSONNEL-CONSULTANTS		4,000	8,000	4,000
P-4 PROJECT MANAGER	UNFPA	12	12	6	DUTY TRAVEL		5,000	5,500	4,000
4.4426					CONTRACTUAL SERVICES		60,000	60,000	70,000
G-4 SECRETARY	UNFPA	12	12	6	SEMINAR COSTS		443,825	268,830	263,620
4.4428					SUPPLIES AND EQUIPMENT		411,000	483,927	399,307
TOTAL		1	2	1	FELLOWSHIPS		6,180	6,810	22,340
CONSULTANT MONTHS	UNFPA	1	2	1	MISCELLANEOUS COSTS		154,000	258,000	156,000
TOTAL		8	8	22	LOCAL PERSONNEL COSTS		734,800	449,600	380,106
FELLOWSHIP MONTHS	UNFPA	8	8	22					

MEXICO-1600, ORAL HEALTH

The objectives of this project are to upgrade the oral health of the population, enabling the inhabitants to have an active relationship with their surroundings and optimum involvement in change and progress; to encourage dental care institutions to operate in a coordinated fashion in the solution of the dental health problem; to promote the reorganization of dental sections in all health institutions, and their establishment where they do not now exist; to carry out epidemiological research on oral diseases as well as studies of dental resources; to establish programs for the prevention of oral diseases by means of nationwide fluoridation of public water supplies to bring about a 68% drop in dental decay, self-help methods aimed at prevention of 100% paradontopathies and 30% dental caries (in the school-age population), and use of other materials such as kitchen salt; to expand and rehabilitate dental care services and create new services in areas not presently reached, through the use of basic equipment, auxiliary personnel and specialized optimum maintenance of equipment following a study of each institution in order to at least double existing services in the next three years; and to step up the oral health education program at all levels.

TOTAL		-	12	12	TOTAL		14,314	51,985	57,325
P-4 DENTAL OFFICER	PR	-	12	12	SUBTOTAL	PR	13,020	51,985	57,325
.4130					PERSONNEL-POSTS		-	41,675	43,905
TOTAL		3	1	-	PERSONNEL-CONSULTANTS		5,400	3,000	-
CONSULTANT MONTHS	PR	2	1	-	DUTY TRAVEL		-	2,000	2,200
CONSULTANT MONTHS	PG	1	-	-	FELLOWSHIPS		4,620	5,310	11,220
TOTAL		6	6	11	GRANTS		3,000	-	-
FELLOWSHIP MONTHS	PR	6	6	11	SUBTOTAL	PG	1,294	-	-
					PERSONNEL-CONSULTANTS		1,294	-	-

MEXICO-1602, HUMAN AND MATERIAL RESOURCES IN DENTISTRY (UNIVERSITY OF YUCUTAN)

PAHEF is cooperating with the School of Dentistry of the University of Yucutan through the provision of supplies and equipment.

TOTAL	PH	293	-	-
SUPPLIES AND EQUIPMENT		293	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

MEXICO-2100, WATER SUPPLIES AND SEWERAGE SYSTEMS

The main purpose of this project is to accelerate and improve programming procedures and facilities design, management, operation and maintenance of systems in order to meet the coverage, quantity, quality, continuity, cost and financing required for drinking water supplies and sewerage systems. The objectives are to identify operational features and methods for systematic development of the sector; draw up a training plan; promote preventive maintenance; control the quality of potable water; regionalize invoicing and collection procedures, handling of information, program planning and models; reach economic self-sufficiency for the sector; and undertake the treatment of liquid wastes.

TOTAL		36	36	12	TOTAL		208,774	155,292	62,725
P-4 SANITARY ENGINEER	PR	12	12	12					
.0528									
P-4 SANITARY ENGINEER	PR	24	24	-	SUBTOTAL	PR	57,805	61,940	62,725
.4753 .4754									
TOTAL		28	3	3	PERSONNEL-POSTS		39,475	41,675	43,905
CONSULTANT MONTHS	PR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
CONSULTANT MONTHS	PR	25	-	-	DUTY TRAVEL		2,300	2,300	2,500
TOTAL		9	9	6	SUPPLIES AND EQUIPMENT		1,000	1,000	-
FELLOWSHIP MONTHS	PR	9	9	6	FELLOWSHIPS		6,930	7,965	6,120
					SUBTOTAL	PR	150,969	93,352	-
					PERSONNEL-POSTS		73,720	92,352	-
					PERSONNEL-CONSULTANTS		67,601	-	-
					DUTY TRAVEL		1,000	1,000	-
					SUPPLIES AND EQUIPMENT		8,648	-	-

MEXICO-2300, CONTROL OF ENVIRONMENTAL POLLUTION

The objectives of this project are to carry out studies to determine environmental pollutants; draw up standards and regulations; improve laboratories and research centers; and train personnel.

TOTAL		1	1	1	TOTAL	PR	2,700	5,655	6,460
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		-	3	3	FELLOWSHIPS		-	2,655	3,060
FELLOWSHIP MONTHS	PR	-	3	3					

MEXICO-2301, IMPROVEMENT OF THE ENVIRONMENT

The basic purpose of this project is to assist the Government in its efforts to improve the environment, including the creation of mechanisms for solving environmental problems and the support of research, planning and implementation activities. It furthermore proposes to establish work methodologies for programs to monitor air, water and soil pollution, study the effect of pollutants on health, and encourage the development of human resources for program implementation.

TOTAL		6	-	-	TOTAL	UNDP	291,500	-	-
P-5 PROJECT MANAGER	UNDP	6	-	-	PERSONNEL-POSTS		25,080	-	-
4.4169					PERSONNEL-CONSULTANTS		98,000	-	-
TOTAL		28	-	-	SUPPLIES AND EQUIPMENT		104,420	-	-
CONSULTANT MONTHS	UNDP	28	-	-	FELLOWSHIPS		44,000	-	-
TOTAL		57	-	-	GRANTS		20,000	-	-
FELLOWSHIP MONTHS	UNDP	57	-	-					

MEXICO-3300, ZOONOSIS CONTROL

The aim of this project is to plan the actions needed to control the zoonoses that affect human health and animal production and productivity. FAO/WHO is cooperating in the program reorganization with a view to better use of the national resources available for this purpose.

TOTAL		2	2	2	TOTAL	WR	14,640	16,620	19,040
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		12	12	12	FELLOWSHIPS		9,240	10,620	12,240
FELLOWSHIP MONTHS	WR	12	12	12					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

MEXICO-3301, RABIES CONTROL - MEXICO-UNITED STATES BORDER

The programs of the Field Office in El Paso are concerned with health problems of zoonoses along the frontier of the United States of America and Mexico. The objectives are to stimulate and promote joint study and planning of zoonoses activities, particularly rabies, including the study and examination of other zoonotic problems existing along the frontier; and to assist in the interchange of epidemiological and related information between frontier health authorities.

TOTAL		12	12	12	TOTAL		136,754	72,155	72,105
P-4 VETERINARIAN	PR	12	12	12	SUBTOTAL	PR	59,770	72,155	72,105
4.3223									
TOTAL		1	1	1	PERSONNEL-POSTS		39,475	41,675	43,905
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					DUTY TRAVEL		2,500	3,000	3,500
					SEMINAR COSTS		4,375	9,075	8,055
					SUPPLIES AND EQUIPMENT		3,200	8,065	5,270
					COMMON SERVICES		7,520	7,340	7,975
					SUBTOTAL	PG	76,984	-	-
					SUPPLIES AND EQUIPMENT		3,333	-	-
					LOCAL PERSONNEL COSTS		67,459	-	-
					LOCAL TRANSPORTATION		6,192	-	-

MEXICO-4400, COMMUNITY DEVELOPMENT AND HEALTH PROMOTION TRAINING

The project is intended to contribute to the promotion of overall development of rural communities, with emphasis on health, through education and inservice training of personnel from the Coordinated Public Health Services of the Secretariat of Health and Welfare, to enable them to work more effectively and efficiently with the recipient communities.

TOTAL		2	-	-	TOTAL	WD	9,775	-	-
P-4 NUTRITIONIST	WD	2	-	-	PERSONNEL-POSTS		9,430	-	-
4.4476					DUTY TRAVEL		345	-	-

MEXICO-4500, REHABILITATION

Under this project it is proposed to carry out a program to minimize disability and its effects on the country's population; to incorporate the disabled into active economic and social life; to train rehabilitation personnel in neurology, communications, blindness and mental retardation; and to continue prosthetic and orthotic activities.

TOTAL		12	12	12	TOTAL	WR	59,640	64,820	83,940
P-4 PROSTHETICS TECHNICIAN	WR	12	12	12	PERSONNEL-POSTS		43,000	46,200	49,700
4.3106					PERSONNEL-CONSULTANTS		5,400	6,000	13,600
TOTAL		2	2	4	DUTY TRAVEL		2,000	2,000	2,280
CONSULTANT MONTHS	WR	2	2	4	FELLOWSHIPS		9,240	10,620	18,360
TOTAL		12	12	18					
FELLOWSHIP MONTHS	WR	12	12	18					

MEXICO-5100, DEVELOPMENT OF HEALTH SERVICES

The aims of this project are to assist in meeting the objectives of the National Health Plan; improve general health services through the adoption of regional systems which tally with the nature of the federated entities; expand coverage to the rural population and encourage community participation; undertake administrative reform in all institutions and at all levels; adopt and develop information systems; promote identification of common planning areas; develop key projects and draft the respective health plans; control communicable diseases; establish regional epidemiological services; set up a sufficient number of laboratories; improve support for general health services; train professional, technical and auxiliary personnel; carry out research to determine the effect of the different health policies; and develop methods to increase the productivity and efficiency of health services.

TOTAL		12	12	12	TOTAL	WR	71,980	86,100	124,480
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		28,665	46,200	49,700
4.4805					PERSONNEL-CONSULTANTS		10,800	3,000	10,200
TOTAL		4	1	3	DUTY TRAVEL		1,500	1,500	1,500
CONSULTANT MONTHS	WR	4	1	3	SUPPLIES AND EQUIPMENT		215	-	1,980
TOTAL		40	40	60	FELLOWSHIPS		30,800	35,400	61,200
FELLOWSHIP MONTHS	WR	40	40	60					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

MEXICO-5101, FIELD OFFICE - UNITED STATES-MEXICO BORDER

This project is connected with health problems on the frontier between the United States and Mexico, and its objectives are to encourage and promote the study and joint planning of health activities in the frontier area; support the exchange of epidemiological information between frontier health authorities; protect environmental health; and coordinate nursing personnel, medical anthropology and medical economics. The project aims to strengthen local services on both sides of the border, facilitate the development of joint health programs, and act as a Secretariat for the United States-Mexico Border Health Association.

The United States-Mexico Border Health Association continues to provide the principal mechanism for liaison between the authorities and health workers in both countries in responding to health needs and problems in the area. The Association's Constitution has been revised and amendments made that will contribute to its more effective operation; the new Constitution came into force in 1976. As a result, the Regional Binational Health Councils have assumed a more significant role that will strengthen their contribution to the interchange of experiences. This is a joint project with United States of America-5101.

TOTAL		105,390	108,425	115,577
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SUBTOTAL	PR	90,040	98,150	102,627
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PERSONNEL-POSTS		75,990	83,050	88,077
PERSONNEL-CONSULTANTS		1,750	2,000	2,250
DUTY TRAVEL		4,800	5,600	4,800
GRANTS		7,500	7,500	7,500
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SUBTOTAL	WR	15,350	10,275	12,950
-----		-----	-----	-----
SEMINAR COSTS		2,500	2,500	2,500
SUPPLIES AND EQUIPMENT		6,300	300	2,550
COMMON SERVICES		6,550	7,475	7,900

MEXICO-5102, HEALTH SERVICES IN CHIAPAS

The objectives of this project are to foster livestock development and the production of healthful foodstuffs at the school, family and community level; to raise nutritional levels of the most vulnerable population, especially mothers and children; to provide dietary education and advice on the educational programs in the area; to improve the health of the inhabitants of the area by means of activities geared to the maternal and child sector, control of communicable diseases and environmental sanitation; and to promote full, rational use of natural resources, and guide the course for policies of action which pursue the physical and socioeconomic integration of the communities in the area.

TOTAL		12	12	24	TOTAL	PR	68,545	59,150	101,570
-----		-----	-----	-----	-----		-----	-----	-----
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	65,570
.4401					PERSONNEL-CONSULTANTS		13,500	-	-
P-3 NURSE	PR	-	-	12	DUTY TRAVEL		2,100	2,200	3,400
.4876					SUPPLIES AND EQUIPMENT		1,920	2,000	2,000
TOTAL		5	-	-	FELLOWSHIPS		11,550	13,275	30,600
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	PR	5	-	-					
TOTAL		15	15	30					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	15	15	30					

MEXICO-6000, DEVELOPMENT OF HUMAN RESOURCES

The purposes of this project are to assist in the development and coordination of training programs for human resources in the health sector; promote the establishment of a health research policy; study educational policies for the training and updating of professional and technical personnel; develop critical teaching areas; in close cooperation with universities and schools in the health sector, foster joint planning with service institutions to effectively integrate teaching and service; assist in educational, biomedical and socio-epidemiological research which contributes to a better understanding of the country's health problems, medical practice and the incorporation of scientific and technical advances in the training of health personnel; and promote and support interinstitutional and intercountry collaboration and exchange programs at the regional level.

TOTAL		12	12	12	TOTAL		107,465	110,420	120,945
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P-4 MEDICAL EDUCATOR	PR	12	12	12	SUBTOTAL	PR	44,475	110,420	120,945
.3855					-----		-----	-----	-----
TOTAL		5	5	5	PERSONNEL-POSTS		39,475	41,675	43,905
-----		-----	-----	-----	PERSONNEL-CONSULTANTS		-	15,000	17,000
CONSULTANT MONTHS	PR	-	5	5	DUTY TRAVEL		5,000	5,000	5,200
CONSULTANT MONTHS	WR	5	-	-	SEMINAR COSTS		-	6,000	4,000
TOTAL		37	37	42	SUPPLIES AND EQUIPMENT		-	5,000	5,000
-----		-----	-----	-----	FELLOWSHIPS		-	32,745	42,840
FELLOWSHIP MONTHS	PR	-	37	42	GRANTS		-	5,000	3,000
FELLOWSHIP MONTHS	WR	37	-	-	-----		-----	-----	-----
					SUBTOTAL	WR	62,990	-	-
					-----		-----	-----	-----
					PERSONNEL-CONSULTANTS		13,500	-	-
					SEMINAR COSTS		8,000	-	-
					SUPPLIES AND EQUIPMENT		5,000	-	-
					FELLOWSHIPS		28,490	-	-
					GRANTS		8,000	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

MEXICO-6300, NURSING EDUCATION

The purposes of this project are to improve the quality of education and provide a structure and organization for the training of human resources in nursing, under a program which is consistent with the nation's needs and capabilities. The objectives are to establish a policy for development of human resources in nursing; draft and carry out a program to train nursing personnel; develop postbasic and specialized courses; design inservice training and/or continuing education programs; improve nursing management and care; and upgrade the organization, administration and curricula in nursing education.

TOTAL		12	12	12	TOTAL		47,184	40,040	42,895
P-3 NURSE EDUCATOR .0517	PR	12	12	12	SUBTOTAL	PR	23,910	40,040	42,895
TOTAL		3	1	1	PERSONNEL-POSTS		22,410	35,540	37,495
CONSULTANT MONTHS	PR	-	1	1	PERSONNEL-CONSULTANTS		-	3,000	3,400
CONSULTANT MONTHS	PH	3	-	-	DUTY TRAVEL		1,500	1,500	2,000
					SUBTOTAL	PH	23,274	-	-
					PERSONNEL-CONSULTANTS		7,974	-	-
					SUPPLIES AND EQUIPMENT		300	-	-
					COMMON SERVICES		15,000	-	-

MEXICO-6400, SANITARY ENGINEERING EDUCATION

This project proposes to undertake a study of the human resources working in environmental sanitation; implement a training program of regular and short-term courses in sanitation engineering; coordinate the educational activities of the universities and institutions responsible for environmental sanitation; improve sanitation engineering laboratories and libraries; and transfer technology.

TOTAL		2	2	2	TOTAL	WR	22,020	23,310	16,920
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		6	6	6	SUPPLIES AND EQUIPMENT		4,000	4,000	-
FELLOWSHIP MONTHS	WR	6	6	6	FELLOWSHIPS		4,620	5,310	6,120
					COURSE COSTS		8,000	8,000	4,000

MEXICO-6500, VETERINARY MEDICINE EDUCATION

The purpose of this project is the upgrading of education in veterinary medicine by means of better qualified teaching personnel, laboratories, experimental farms and scientific research at the institutions of learning.

TOTAL		1	1	1	TOTAL	WR	18,790	18,045	9,520
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		17	17	6	SEMINAR COSTS		3,000	-	-
FELLOWSHIP MONTHS	WR	17	17	6	FELLOWSHIPS		13,090	15,045	6,120

MEXICO-6900, TRAINING CENTER IN IMMUNOLOGY

The objectives of this project are to cooperate in regular, multidisciplinary training in immunology, to foster and coordinate scientific research, and to provide refresher training for specialists in immunology. PAHO/WHO is aiding in the selection of foreign candidates for the regular courses and in the training of professionals from other countries. This cooperation is expected to be expanded in the future, and an attempt made to incorporate this project into international activities in order to broaden the Center's capabilities.

TOTAL		1	1	-	TOTAL	PR	5,510	6,155	-
CONSULTANT MONTHS	PR	1	1	-	PERSONNEL-CONSULTANTS		2,700	3,000	-
TOTAL		3	3	-	SUPPLIES AND EQUIPMENT		500	500	-
FELLOWSHIP MONTHS	PR	3	3	-	FELLOWSHIPS		2,310	2,655	-

MEXICO-7301, NATIONAL HEALTH LABORATORIES

The purposes of this project are to upgrade the National Health Laboratories both in the diagnostic area and in the production and monitoring of immunizing biologicals required for government programs, and to develop new perfusion techniques for the industrial production of virus vaccines using cell cultures.

PAHO/WHO is providing technical advisory services in the design of equipment and its use and operation, and also with respect to inservice training of the professional and technical personnel responsible for the laboratories.

	FUND	1977	1978	1979
TOTAL		6	-	-
P-4 VACCINE CONSULTANT .4537	PG	4	-	-
P-4 VACCINE CONSULTANT 4.4537	UNDP	2	-	-

	FUND	1977	1978	1979
		\$	\$	\$
TOTAL		42,600	-	-
SUBTOTAL	PG	34,400	-	-
PERSONNEL-POSTS		13,000	-	-
DUTY TRAVEL		6,139	-	-
SUPPLIES AND EQUIPMENT		15,261	-	-
SUBTOTAL	UNDP	8,200	-	-
PERSONNEL-POSTS		8,200	-	-

MEXICO-8400, DENTAL EDUCATIONAL MATERIAL

The purpose of this project is to cooperate with the Mexican Association of Faculties and Schools of Odontology in the acquisition of supplies and equipment.

TOTAL	PH	4,378	-	-
SUPPLIES AND EQUIPMENT		4,378	-	-

MEXICO-8700, LATIN AMERICAN CENTER OF EDUCATIONAL TECHNOLOGY FOR HEALTH

The primary purpose of the Latin American Center of Educational Technology for Health is to provide Latin American institutions offering training in the health sciences with the necessary services for ensuring the more efficient training of the manpower required for meeting health needs. Its other objectives include continuation of the training of teaching personnel in educational technology; the promotion of the establishment of regional training and extension centers; support for the design, execution and evaluation of institutional programs; and the production of teaching materials.

TOTAL		1	1	1	TOTAL	66,853	38,010	37,840	
CONSULTANT MONTHS	PR	-	-	1	SUBTOTAL	PR	12,000	12,000	37,840
CONSULTANT MONTHS	WR	1	1	-	PERSONNEL-CONSULTANTS		-	-	3,400
TOTAL		26	26	22	FELLOWSHIPS		-	-	22,440
FELLOWSHIP MONTHS	PR	-	-	22	GRANTS		12,000	12,000	12,000
FELLOWSHIP MONTHS	WR	26	26	-	SUBTOTAL	PH	32,133	-	-
					SUPPLIES AND EQUIPMENT		13,176	-	-
					LOCAL PERSONNEL COSTS		12,957	-	-
					COMMON SERVICES		6,000	-	-
					SUBTOTAL	WR	22,720	26,010	-
					PERSONNEL-CONSULTANTS		2,700	3,000	-
					FELLOWSHIPS		20,020	23,010	-

MEXICO-8701, EDUCATIONAL TECHNOLOGY IN DENTISTRY

The purposes of this project are to coordinate all programs of the Asociación Mexicana de Facultades y Escuelas de Odontología with the Latin American Center for Educational Technology in Health; develop support materials for the education and training of human resources in dentistry; assist in the training of manpower needed in the area; participate in curriculum analyses of the various schools and colleges of dentistry; and cooperate in the design of new teaching methods.

TOTAL		12	-	-	TOTAL	65,477	-	-
P-4 DENTAL OFFICER .4130	PR	12	-	-	SUBTOTAL	PR	18,975	-
TOTAL		2	-	-	PERSONNEL-POSTS		18,975	-
CONSULTANT MONTHS	PH	2	-	-	SUBTOTAL	PH	46,502	-
					PERSONNEL-POSTS		20,500	-
					PERSONNEL-CONSULTANTS		6,197	-
					DUTY TRAVEL		3,253	-
					SUPPLIES AND EQUIPMENT		15,430	-
					COMMON SERVICES		1,122	-

NETHERLANDS ANTILLES

The Netherlands Antilles comprise two groups of islands: the Leeward Islands (Curaçao, Aruba and Bonaire), located approximately 40 miles off the northern coast of Venezuela, and the Windward Islands (St. Maarten, St. Eustatius and Saba), in the vicinity of the Virgin Islands. The two groups are separated by a distance of approximately 500 miles.

The National Government has its seat in Curaçao and each of the six islands has its own local government. At the end of 1975 the estimated population was 240,000, of which 157,000 live in Curaçao, 62,000 in Aruba, 10,500 in St. Maarten, 8,800 in Bonaire, 1,500 in St. Eustatius, and 1,000 in Saba.

Most of the population lives in urban areas. Of the total population, 11.3% are under 5 years of age, 38.1% are under 15 years, 56.5% are between 15 and 64 years, and 5.4% are 65 years and over. There are 103 women per 100 men.

Life expectancy is estimated at 71.4 years for males and 75.3 years for females. The birth rate is estimated at 19.9 and the crude death rate at 4.8 per 1,000 population. Infant mortality is 20 per 1,000 live births.

There were 47,522 dwelling units in 1972 of which 75.7% were in inadequate condition and 16.8% in poor condition. In the same year, 88.9% of dwelling units had water supply, 3.5% had none, and no information was available for the remaining 7.6%. With respect to electricity, 87.4% had service, 77.4% had baths, 82.6% had radios, and 62.8% had television sets.

Illiteracy is almost nonexistent. There is universal opportunity for enrollment in primary and secondary schools. Educational facilities are limited but the necessary steps are being taken for their extension. There are also programs with other countries for higher training abroad.

Per capita national income is estimated to be about \$1,050 per annum at current market prices, and has been growing at a moderate but steady rate (about 3% per annum).

Unemployment is estimated at about 15% of the labor force, and there is also considerable underemployment. The trade balance is negative, as is the balance of payments. In April 1975, the consumer price index (1970 = 100) rose to 156.9, as compared to 131.8 and 111.8 in 1974 and 1973 respectively.

At the Central Government level there is a Ministry of Health, which has as its technical and administrative branch a Department of Public Health. The Ministry has the power to enact all legislation and ordinances required to ensure the health of the population and to supervise the implementation of such legislation.

The Central Government is also responsible for advising, supporting and complementing the efforts of island governments to implement health policies, as well as for providing services which for technical, economic, administrative and other reasons cannot be provided by island governments, as in the case of mosquito control, public health laboratory services, mental health services, and others. Each island government is responsible for implementing health policies and for taking the necessary steps to guarantee the health of the population of the island territory. Island governments also run most health centers and clinics, as well as basic sanitation and epidemiology services in their respective territories.

Medical care facilities, with the exception of the mental hospital, are owned and operated by private nonprofit organizations. Both the Central Government and the island governments pay for the services of these facilities, as follows: (a) cost of services provided to workers and employees covered by Social Security is reimbursed by the Social Security System; (b) the Government reimburses cost of medical care services provided to federal or island government public servants, and 90% of the cost of services provided to their dependents; (c) individuals not included in (a) and (b) above but with capacity to pay must cover the cost of services received, either directly or through a commercial health insurance scheme; and (d) cost of service to individuals not included under (a) or (b) above, without capacity to pay, receive free, prepaid medical care from the governments.

At the beginning of 1974 the Netherlands Antilles had 10 general hospitals with 1,478 beds, 1 psychiatric hospital with 559 beds, and 9 homes for the aged with 352 beds. There are 25 pharmacies: 18 in Curaçao, 5 in Aruba, 1 in Bonaire and 1 in the Windward Islands.

At the beginning of 1974 there were 156 physicians: 107 in Curaçao, 41 in Aruba, 2 in Bonaire and 6 in the Windward Islands. Of these, 56 were specialists in various fields and 100 were general practitioners. The island governments employed 26 physicians. There were 33 dentists (21 in Curaçao, 9 in Aruba and 3 in the Windward Islands); 5 veterinarians (3 in Curaçao, 1 in Aruba and 1 in St. Maarten); 431 nurses with diploma working in hospitals (335 in Curaçao, 73 in Aruba, 7 in Bonaire and 16 in the Windward Islands); 650 auxiliary nurses (603 in Curaçao, 15 in Bonaire and 32 in the Windward Islands); and 18 trained midwives (16 in Curaçao, 1 in Aruba and 1 in Bonaire).

With the exception of Curaçao where there is no Aedes aegypti program and St. Maarten which is still in the attack phase, all of the territories are in the maintenance phase.

NETHERLANDS ANTILLES

PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	5,010	24.5	5,655	24.2	8,195	28.7
=====	=====	=====	=====	=====	=====	=====
0700 AEDES AEGYPTI-BORNE DISEASES	5,010	24.5	5,655	24.2	8,195	28.7
=====	=====	=====	=====	=====	=====	=====
II. DEVELOPMENT OF THE INFRASTRUCTURE	15,400	75.5	17,700	75.8	20,400	71.3
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	15,400	75.5	17,700	75.8	20,400	71.3
-----	-----	-----	-----	-----	-----	-----
5100 GENERAL PUBLIC HEALTH SYSTEMS	15,400	75.5	17,700	75.8	20,400	71.3
-----	-----	-----	-----	-----	-----	-----
GRAND TOTAL	20,410	100.0	23,355	100.0	28,595	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

NETHERLANDS ANTILLES
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			32	4,890	32	5,705	32	6,190
	Medical Officer	0.0610	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			10	1,905	10	2,020	10	2,140
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			19	2,815	19	3,035	19	3,270
	Veterinarian Seminar Costs	4.4045	P-5						
AMRO-4410 (PR)	<u>Health Education</u>			15	2,155	15	2,320	15	2,455
	Health Education Specialist	0.0918	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			12	1,720	12	1,860	12	2,005
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			10	1,230	10	1,320	10	1,405
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			9	1,185	9	1,270	9	1,350
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			9	1,470	9	1,570	9	1,675
	Administrative Methods Officer	0.0917	P-4						
	Total All Programs			149	36,970	149	42,580	149	45,310
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

NETHERLANDS ANTILLES - DETAIL

NETHERLANDS ANTILLES-0700, Aedes Aegypti ERADICATION

Of the six islands of the Netherlands Antilles group, only Curaçao and St. Maarten are still infested with *Aedes aegypti*. The other four, which are actually negative, are exposed to the risk of reinfestation coming mainly from Curaçao and other Caribbean countries. During 1976 a technical officer was transferred to Curaçao to improve field assistance in the five active campaigns and to control the program drawn up for Curaçao by local authorities.

The purpose of this project is to assist the Federal Government in the coordination, evaluation and assessment of the eradication campaigns through direct advisory services.

TOTAL		1	1	1	TOTAL	PR	5,010	5,655	8,195
		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		-	-	1,735
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
		-----	-----	-----					
FELLOWSHIP MONTHS	PR	3	3	3					

NETHERLANDS ANTILLES-5100, DEVELOPMENT OF HEALTH SERVICES

The Netherlands Antilles have begun a process of transferring health institutions, especially hospitals, to the Government. The personnel who directed these establishments, which were previously dependent on charitable institutions, are leaving the country, and there is not a sufficient number of trained professionals. The purpose of this project is to contribute to the efficient operation of health services by training national personnel.

TOTAL		20	20	20	TOTAL	NR	15,400	17,700	20,400
		-----	-----	-----			-----	-----	-----
FELLOWSHIP MONTHS	NR	20	20	20	FELLOWSHIPS		15,400	17,700	20,400

NICARAGUA

Nicaragua is the largest country in Central America. It is bordered on the north by Honduras, on the south by Costa Rica, on the east by the Atlantic Ocean and on the west by the Pacific Ocean. It covers an area of 118,358 km², excluding the surface area of the lakes which is approximately 10,000 km².

The estimated population (1975) was 2,239,000 inhabitants and the population density 17.5 persons per km²; the population density in the three large geophysical regions, the Pacific, central-north and Atlantic, is varied. The most highly populated is the Pacific region, where the density is approximately 70 persons per km² while in the Atlantic region there are only three inhabitants per km². It is estimated that the annual average population growth rate will be 3.5% in 1980. The intercensal urban growth rate is 4.7% while the increase in rural areas is only 1.14%. There is considerable migration from the rural to the urban areas, which creates acute problems in the provision of services. The present population of Managua exceeds 400,000 inhabitants, and 27% of the remaining population of the country lives in six cities with more than 20,000 inhabitants.

Agriculture is the basis of the economy, especially cotton, coffee, rice, sugar cane and livestock. However, the processing industries, especially the food processing industries, have expanded considerably in recent years, and this has affected the exports of the industrial sector which at present exceed 25% of total exports. According to the annual report of the Central Bank of Nicaragua for 1974, national production responded dynamically to demand both in the export sector and in the domestic market. In 1974 cotton prices were favorable and thus substantially improved export earnings.

In 1974 Nicaragua, whose population represents 12.7% of the Central American population, had a per capita GDP of 469 Central American pesos (1 Central American peso = US\$1) (1970), which put the country in second place, after Costa Rica. In per capita terms, the real product of Nicaragua increased by 9.7%, giving rise to an average private consumption of 527 Central American pesos.

Health statistics indicate a high incidence of waterborne and parasitic diseases and a high infant mortality rate; these conditions reflect basic sanitation indices that are still unsatisfactory. By the end of 1974, the entire urban population had potable water service, almost 72% with inhouse connections, while only 14% of the rural population had any water service for domestic consumption. In the area of excreta disposal, approximately 33% of the urban population has sewer service and approximately 60% is served by latrines; the remainder has no service at all.

Only the city of Managua has services for the collection and final disposal of solid waste in a sanitary fill. The other departmental capitals only have an incipient system of collection and transportation with open air disposal. The pollution of watercourses is already a problem in the country because of the direct discharges of sewage and industrial wastes, heavy use of agricultural fertilizers and pesticides, etc.

Despite the effort made by the health institutions, the health level of the Nicaraguan population is still unsatisfactory. Life expectancy for the five-year period (1970-1974) was 51.2 years for males and 54.5 years for females, according to CELADE data.

Children under 15 years of age account for 46% of all deaths; many of these deaths are caused by diseases that are preventable by modern technology such as diseases preventable by vaccination, enteric diseases, and protein-calorie malnutrition. Mortality indices indicate a high prevalence and incidence of the following diseases: diarrheal diseases and other enteric diseases, respiratory diseases, malaria, tuberculosis and malnutrition.

Since the most important problems occur in the rural areas, it may be said that the coverage of the health problems is limited. The purpose of the present programs of the health sector is to reduce the epidemiological and demographic problems of Nicaragua by improving and extending health services to rural areas that are at present unserved.

To achieve the foregoing purpose, programs designed to reduce morbidity and mortality caused by the diseases mentioned above are required, principally in the health sector. This means providing minimum environmental sanitation services, improving and extending medical care services, vaccinating against preventable diseases, controlling parasitic diseases, etc. It is also essential to improve institutional capacity and to train personnel in the various health sectors. A fundamental factor for the implementation of health programs is a constant health process and community promotion.

The health sector of Nicaragua is organized institutionally as follows: Ministry of Public Health, Junta Nacional de Asistencia y Previsión Social (JNAPS), local Social Assistance Boards, Instituto Nicaragüense de Seguridad Social (INSS), and Medical Services of the National Guard in addition to private institutions, primarily located in the capital and in the principal urban centers of the country.

In cooperation with AID, the Government of Nicaragua has organized the Instituto de Bienestar Campesino (INBIERNO) to conduct programs for improving the economic well-being of farmworkers in order to raise their level of living and to integrate them into the national development plan. In compliance with the Government's policy of unity of purpose, the health sector has planned and implemented health programs coordinated with the objectives of INBIERNO.

The health sector already has available a preliminary analysis of the present situation in Nicaragua, prepared by the Analysis Unit of the health sector, in cooperation with AID, which indicates the level and the structure existing in the country, the factors conditioning the state of health, the available infrastructure, the characteristics of the population, and other factors considered of great value and importance in formulating the project for improving physical resources, training health personnel, extending and improving services, etc.

Available official statistics show that the distribution by zone and department of the services of the Ministry of Public Health provides national coverage, and that the distribution of the structure for the sector of consultations, visits and inspections is 57% for the Pacific area, 25% for the central area, and 6% for the Atlantic area. The remaining territory, i.e., 12%, is covered by the mobile services of the PUMAR units.

In the curative medicine sector, there were 6.5 physicians, 0.6 dentists, 2.3 nurses, 10.5 nursing auxiliaries and 22.2 hospital beds per 10,000 population in 1974. In the same year, the distribution of physicians by institution was as follows: JNAPS, 50.6%; INSS, 25.8%; Ministry of Public Health, 18.5%; Military Hospital, 3.8%; Red Cross, 0.1%, and private centers, 1.2%.

The foregoing indicators show an absolute increase from 884 physicians in 1967 to 1,357 in 1974. The social and medical care indicators are still low despite the improvement obtained in 1975, the official statistics of which are still not available.

NICARAGUA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	216,624	34.2	195,205	47.2	206,865	64.7
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	88,785	14.0	94,730	22.9	98,005	30.7
-----	-----	-----	-----	-----	-----	-----
0200 COMMUNICABLE DISEASES						
MALARIA	88,785	14.0	94,730	22.9	98,005	30.7
-----	-----	-----	-----	-----	-----	-----
ENVIRONMENTAL HEALTH SERVICES	87,199	13.8	53,255	12.9	57,320	17.9
-----	-----	-----	-----	-----	-----	-----
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	49,310	7.8	53,255	12.9	57,320	17.9
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	37,889	6.0	-	-	-	-
-----	-----	-----	-----	-----	-----	-----
COMPLEMENTARY SERVICES	40,640	6.4	47,220	11.4	51,540	16.1
-----	-----	-----	-----	-----	-----	-----
4100 NURSING	38,330	6.0	41,565	10.0	45,080	14.1
4300 EPIDEMIOLOGICAL SURVEILLANCE	2,310	.4	5,655	1.4	6,460	2.0
-----	-----	-----	-----	-----	-----	-----
II. DEVELOPMENT OF THE INFRASTRUCTURE	418,725	65.8	218,529	52.8	113,050	35.3
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	183,408	28.8	100,685	24.3	108,050	33.7
-----	-----	-----	-----	-----	-----	-----
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	75,870	11.9	88,560	21.4	94,495	29.5
5100 GENERAL PUBLIC HEALTH SYSTEMS	107,538	16.9	12,125	2.9	13,555	4.2
-----	-----	-----	-----	-----	-----	-----
DEVELOPMENT OF HUMAN RESOURCES	235,317	37.0	117,844	28.5	5,000	1.6
-----	-----	-----	-----	-----	-----	-----
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	231,117	36.3	116,344	28.1	3,400	1.1
6400 ENVIRONMENTAL SCIENCES	4,200	.7	1,500	.4	1,600	.5
-----	-----	-----	-----	-----	-----	-----
GRAND TOTAL	635,349	100.0	413,734	100.0	319,915	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

NICARAGUA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III	<u>Program Planning and General Activities</u>			50	27,935	50	29,490	50	31,450
AMRO-5030 (PR/WR)	Area Representative Seminar Costs	0.0283	D-1						
AMRO-1330 (PR/PG)	<u>Maternal and Child Health and Family Welfare</u>			36	10,243	36	9,210	36	7,590
AMRO-1331	Medical Officer Consultants and Seminars	0.3365	P-5						
AMRO-2030 (PR/WR)	<u>Environmental Health Services</u>			130	18,405	110	16,200	105	20,180
	Sanitary Engineer	0.0849	P-4						
	Solid Waste Engineer	4.4932	P-4						
AMRO-3130 (PR/WR/PG/WT)	<u>Animal Health and Veterinary Public Health</u>			220	56,990	225	47,615	160	37,730
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist	0.4687	P-3						
	Local Costs								
AMRO-4130 (PR)	<u>Nursing</u>			95	12,740	90	13,423	100	15,453
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330 (PR/WR)	<u>Epidemiological Surveillance</u>			60	12,470	95	18,525	40	13,045
AMRO-4331	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			36	4,685	36	4,905	36	5,125
	Health Planner	0.2031	P-4						
AMRO-5430 (PR/WR)	<u>Statistics and Information Systems</u>			36	6,155	36	6,570	36	7,060
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			50	5,435	50	5,705	50	5,975
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			36	2,885	36	4,540	36	4,885
	Health Manpower Officer	0.3627	P-4						
	Total All Programs			749	157,943	764	156,183	649	148,493

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This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

NICARAGUA - DETAIL

NICARAGUA-0200, MALARIA ERADICATION

This project is aimed at reducing the incidence of malaria through the present strategy, which includes, among other activities, insecticide spraying, antilarval measures, and chemotherapy, adapted to epidemiologic needs in different areas.

TOTAL		24	24	24	TOTAL		88,785	94,730	98,005
P-4 MEDICAL OFFICER 4.0536	WR	12	12	12					
P-4 SANITARY ENGINEER 4.4664	PR	12	12	12	SUBTOTAL	PR	41,475	43,775	46,105
TOTAL		3	3	-	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		2,000	2,100	2,200
FELLOWSHIP MONTHS	WR	3	3	-	SUBTOTAL	WR	47,310	50,955	51,900
					PERSONNEL-POSTS		43,000	46,200	49,700
					DUTY TRAVEL		2,000	2,100	2,200
					FELLOWSHIPS		2,310	2,655	-

NICARAGUA-2000, ENVIRONMENTAL SANITATION

The Institutional Plan (1975) of the Ministry of Public Health establishes the policies and strategies for improving the coverage of the following services: water supply, sewerage, environmental pollution center, solid wastes, basic sanitation for rural areas, as well as for coordinating the activities of those services with those for the control of diseases preventable by vaccination and the improvement of nutrition. Manpower development is a fundamental factor in the achievement of those objectives.

The purpose of the project is to provide technical assistance in the planning, programming and conduct of those activities and in the evaluation and coordination of interinstitutional and intersectoral activities. In addition, it provides for the improvement of the quality of domestic water supplies and the protection of water resources to be used in the future.

TOTAL		12	12	12	TOTAL	WR	49,310	53,255	57,320
P-4 SANITARY ENGINEER 4.4334	WR	12	12	12	PERSONNEL-POSTS		43,000	46,200	49,700
TOTAL		1	1	-	PERSONNEL-CONSULTANTS		2,700	3,000	-
					DUTY TRAVEL		1,300	1,400	1,500
CONSULTANT MONTHS	WR	1	1	-	FELLOWSHIPS		2,310	2,655	6,120
TOTAL		3	3	6					
FELLOWSHIP MONTHS	WR	3	3	6					

NICARAGUA-3101, ANIMAL HEALTH STUDY

The purpose of this project is to assist the Government in establishing and installing the technical and administrative infrastructure in the livestock sector of the Ministry of Agriculture and Stockraising so as to enable it to control and eradicate brucellosis, tuberculosis and other zoonoses; to support ongoing programs designed to reduce the incidence of those diseases that have an adverse effect on livestock development and breeding; to reduce the potential risk for human beings of brucellosis, tuberculosis and other zoonoses; to reduce the economic losses caused each year by these diseases to the national herd; and to increase the supply of meat and milk for local consumption and maintenance of export markets.

TOTAL		10	-	-	TOTAL	PG	37,889	-	-
CONSULTANT MONTHS	PG	10	-	-	PERSONNEL-CONSULTANTS		33,631	-	-
					SUPPLIES AND EQUIPMENT		300	-	-
					PROGRAM SUPPORT COSTS		3,958	-	-

NICARAGUA-4100, NURSING SERVICES

The purpose of this project is to strengthen and improve the nursing service subsystem in accordance with the needs of the overall health system, with special emphasis on community nursing and primary health care delivery for periurban and rural areas of the country.

TOTAL		12	12	12	TOTAL	WR	38,330	41,565	45,080
P-3 NURSE 4.0544	WR	12	12	12	PERSONNEL-POSTS		30,400	32,500	34,800
TOTAL		9	9	9	DUTY TRAVEL		1,000	1,100	1,100
					FELLOWSHIPS		6,930	7,965	9,180
FELLOWSHIP MONTHS	WR	9	9	9					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

NICARAGUA-4300, EPIDEMIOLOGY AND LABORATORY SERVICES

The purpose of this project is to establish an epidemiological surveillance system for obtaining adequate information on the country's most important nosological entities for establishing priorities and prompt determination of corrective measures when required.

TOTAL		-	1	1	TOTAL	PR	2,310	5,655	6,460
CONSULTANT MONTHS	PR	-	1	1	PERSONNEL-CONSULTANTS		-	3,000	3,400
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	PR	3	3	3					

NICARAGUA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The principal aim of this project is to strengthen the planning system in the health sector institutions. An effort will also be made to formulate programs for extending coverage to the unserved population and provide all the people with opportunities to increase their material, social and cultural well-being through programs of education, health, housing, social security and child welfare and through basic services such as water supply, sewerage, and rural sanitation.

TOTAL		36	36	36	TOTAL	WR	75,870	88,560	94,495
P-5 PAHO/WHO REPRESENTATIVE	WR	12	12	12	PERSONNEL-POSTS		57,370	69,110	74,045
4.0543					DUTY TRAVEL		1,500	1,600	1,700
G-7 ADMINISTRATIVE ASSISTANT	WR	12	12	12	COMMON SERVICES		17,000	17,850	18,750
4.4722									
G-4 SECRETARY	WR	12	12	12					
4.4878									

NICARAGUA-5100, DEVELOPMENT OF HEALTH SERVICES

The health services provided by the institutions of this sector are limited in their coverage, both in geographical terms and in the type of service they offer the population. The fundamental objective of this project is to improve the health structure on all levels and in all its aspects, especially the expansion of health services to the rural areas, the promotion of technical coordination of programs, and the training of personnel. Community participation will also be encouraged.

TOTAL		1	1	1	TOTAL	WR	13,480	12,125	13,555
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		14	9	9	SEMINAR COSTS		-	1,160	975
FELLOWSHIP MONTHS	WR	14	9	9	FELLOWSHIPS		10,780	7,965	9,180

NICARAGUA-5102, EXTENSION OF COVERAGE OF HEALTH SERVICES

The purpose of this project is to provide specialized technical advisory services at the national level in order to achieve the harmonious and uniform development of the rural community action program, which will later be extended to the entire country. This program forms part of the Rural Health Plan, which is being implemented in the country and is financed by an AID loan.

TOTAL		24	-	-	TOTAL	PG	94,058	-	-
CONSULTANT MONTHS	PG	24	-	-	PERSONNEL-CONSULTANTS		82,520	-	-
					PROGRAM SUPPORT COSTS		11,538	-	-

NICARAGUA-6000, IMPROVEMENT OF TEACHING IN THE FACULTIES OF HEALTH SCIENCES AT UNAN

The purpose of this project is to assist the faculties of medicine, dentistry and chemical sciences in carrying out an academic reform that will enable the Universidad Nacional Autónoma de Nicaragua (UNAN) to improve the training of physicians, dentists, pharmacists and paramedical personnel in the country, as well as to coordinate the program for the training of the teaching staff of the faculties of health sciences through fellowships for studies abroad. The action plan will be implemented in accordance with the guidelines set forth in the technical assistance agreement between UNAN and IDB.

TOTAL		32	18	-	TOTAL	PG	228,417	113,344	-
CONSULTANT MONTHS	PG	32	18	-	PERSONNEL-CONSULTANTS		113,441	73,892	-
TOTAL		117	49	-	FELLOWSHIPS		81,845	39,452	-
FELLOWSHIP MONTHS	PG	117	49	-	PROGRAM SUPPORT COSTS		33,131	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

NICARAGUA-6001, DEVELOPMENT OF HUMAN RESOURCES

The planning, programming, execution, supervision and administration of the water supply, sewerage and other services in the field of sanitary engineering call for specialized knowledge of the most up-to-date technology. Nicaragua has planned broad development programs for the next few years with a view to providing all the urban communities and a large percentage of the rural communities with complete services for the supply of good quality potable water, the urban area with sewerage systems and the rural areas with excreta disposal facilities, and the larger cities with modern systems for the collection, transport and disposal of solid wastes; preservation of the environment; and control of the use of water resources. While the provision of specialized instruction in sanitary engineering is essential, it is no less important to intensify and update the teaching of related subjects in the regular courses given by the Faculty of Physical Sciences and Mathematics of the Universidad Nacional Autónoma de Nicaragua (UNAN), so that the engineers who graduate will have enough basic knowledge to enable them to take over responsibility for sanitation, water supply and other works.

Between 20 and 30 professionals graduate every year from the UNAN Faculty of Dentistry in León. An analysis of the situation shows that there is a lack of integration between teaching and service. The change in the system of dental care, which envisages the integration of teaching and dental care as an objective for training and for service, the utilization of diversified human resources in actual dental practice, and the utilization of the simplified equipment and techniques which now exist, will make it possible to achieve greater productivity and broader coverage by programmed stages.

The purposes of this project are to improve the dental training system, train teaching staff by providing short-term fellowships, organize short postgraduate courses on sanitary engineering problems, and request technical assistance for holding local short courses and seminars.

TOTAL		1	1	1	TOTAL	WR	2,700	3,000	3,400
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400

NICARAGUA-6400, SANITARY ENGINEERING EDUCATION

In accordance with the agreement between the National Autonomous University of Nicaragua and PAHO/WHO for sanitary engineering education, personnel are being trained in the new technologies fostered by the National Development Plan in order to have a sufficient number of qualified personnel to meet the needs of the country. With the assistance of PAHO/WHO, the Managua Water Enterprise and the Ministry of Public Health will organize seminars and short courses in specific areas of sanitary engineering:

TOTAL		1	-	-	TOTAL	PR	4,200	1,500	1,600
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	PR	1	-	-	PERSONNEL-CONSULTANTS		2,700	-	-
					GRANTS		1,500	1,500	1,600

PANAMA

The Isthmus of Panama is located between 07°12'09.4" and 09°37'57.7" north latitude and 77°09'24" and 83°03'07" longitude west of Greenwich. It is bordered on the east by Colombia, on the west by Costa Rica, on the north by the Atlantic Ocean, and on the south by the Pacific Ocean. For political administration, the country is divided into nine provinces and one Indian territory (San Blas), 65 districts or municipalities, and 505 electoral districts. As of 1 July 1976, the estimated population of 1,718,700 lives in an area of 77,082 km², including 1,432 km² of national territory called the Panama Canal Zone under the jurisdiction of the United States of America. The population density is 22.7 inhabitants per km². The climate is tropical-maritime, with moderately high temperatures (average maximum 31.2°C, average minimum 23.0°, median 27.1°), high relative humidity throughout the year (average maximum 94.2%, average minimum 63.4%, median 78.6%), abundant rain, free of storms and hurricanes, and with two annual seasons: the dry or summer season, which falls in the astronomical winter, and the rainy or winter season which covers spring, summer, and fall.

Its Atlantic coastline is 1,246.2 kilometers in length, and the Pacific coastline is 1,634.5 kilometers. Four important rivers flow into the Atlantic; they are the Changuinola, 140 kilometers; the Indio, 99 kilometers; the Cricamola, 82 kilometers; and the Sixoala, 65 kilometers. The following rivers flow into the Pacific: the Bayano, 280 kilometers, on which the hydro-electric dam of the same name was built; the Tuira, 230 kilometers; the Santa María, 180 kilometers; and the Chiriquí Viejo, 142 kilometers. The Barú Volcano, 3,475 meters, is the highest point in the country; there are four other peaks of 2,874 meters or higher. The national currency is the balboa, equivalent to the US dollar, which currency is also commonly used throughout the country.

Since the 1970 census, the population has grown at a rate of 3.1% per year. A study of the demographic barycenter, or the center of population gravity, prepared with information from the censuses of 1940, 1950, 1960 and 1970, showed a marked movement of population from the western region to the Province of Panama, especially the metropolitan area.

A comparative analysis of vital statistics shows that during the period 1965-1975 there were decreases in the birth rate per 1,000 inhabitants from 39.2 to 31.7; in overall fertility per 1,000 women 10 to 49 years of age, from 140.4 to 111.9; in the overall death rate per 1,000 inhabitants, from 7.3 to 5.2; in infant mortality per 1,000 live births, from 45.4 to 29.2; in neonatal mortality per 1,000 live births, from 23.7 to 16.2; in child mortality between one and four years of age, from 7.3 to 4.6; and in the maternal mortality rate per 1,000 live births, from 1.5 to 0.9. The death rate (50 years of age or more) increased from 39.9% to 47.0%; and the rate of fetal deaths also increased, from 69.4 per 1,000 live births to 73.0. The growth rate decreased from 31.9 to 26.5 per 1,000 inhabitants, and life expectancy at birth rose from 63.9 to 67.2 years. Between 1950 and 1960, the average size of private households increased from 4.5 to 4.7 persons.

The health situation of the country, measured by the incidence of morbidity and mortality due to communicable diseases and by the register of hospitalized cases, shows the following status for 1975. The ten major communicable diseases, in rates per 10,000 inhabitants, were: (1) diarrhea, 164.5; (2) influenza, 117.3; (3) gonococcal infections, 15.1; (4) syphilis, 9.9; (5) streptococcal angina and scarlet fever, 8.9; (6) hookworm (onchocerciasis), 8.6; (7) tuberculosis (all forms), 5.8; (8) mumps, 4.4; (9) chicken pox, 4.1; and (10) malaria, 4.0. There was a very low incidence of communicable diseases preventable by vaccination, except for tuberculosis which is in sixth place on the list of the 10 major causes. The highest incidence was for measles, 1.5 per 1,000; there were no cases of diphtheria, and the last cases of poliomyelitis occurred in 1971.

The 10 major causes for hospital discharges, expressed in rates per 1,000 inhabitants, were: (1) pregnancy, childbirth and puerperium, with or without complications, 27.1; (2) ill-defined symptoms or morbid states, 6.0; (3) respiratory diseases, 5.1; (4) accidents, poisonings and homicides, 4.8; (5) diseases of the urinary tract, 4.3; (6) enteritis and other diarrheal diseases, 2.4; (7) psychosis, neurosis and oligophrenia, 2.1; (8) infections and other skin diseases, 1.9; (9) rheumatic, hypertensive, ischemic and other heart diseases, 1.7; and (10) intestinal obstructions and hernias, 1.3. These causes represented 75.4% of all hospital discharges and 65.8% of all hospital stays.

Mortality from communicable diseases represented 4.5% of all deaths registered, that is, a rate of 0.2% of total population. Although there is an undetermined degree of under-reporting of deaths, the improvement in registration coverage makes the downward trend in general, infant and maternal mortality rates over the past decade (1966-1975) highly significant. The first five causes for medically certified deaths, in rates per 100,000 inhabitants for 1975, were: (1) ischemic heart diseases, 43.5; (2) malignant tumors, 42.1; (3) accidents, suicides, homicides, 38.4; (4) cardiovascular diseases, 29.3; and (5) pneumonias, 22.5. In 1975, the five major causes of infant mortality, in rates per 10,000, were: (1) injuries at birth, dystocia, anoxia, and hypoxia, 53.6; (2) other causes of perinatal death, 46.8; (3) pneumonia, 28.6; (4) diarrhea, 23.7; and (5) congenital anomalies, 18.6. The rate of infant mortality showed a marked decrease during the last decade, despite the improvement in the coverage of death registration and certification, and even if an unquantified under-reporting is conceded, the magnitude of the decrease is significant.

The high relative importance of perinatal mortality in infant mortality fully justifies the efforts of health authorities to develop programs oriented to preventing these causes of death and/or reducing their incidence. Medically certified deaths during the period 1970-1974 showed the following changes: overall medical certification of death increased from 57.1 to 65.4%, that is, an improvement of 14.5% in this registration over the four-year period. In the certification of deaths of children under one year of age, there was also an improvement of 8.4%, with registrations of 58.4% in 1970 and 63.3% in 1974. For the urban area, total death certifications remained at 96.4%, and those for children under one year of age at 98.1%. For the rural area, the figures rose from 35.8% in 1970 to 39.0% in 1974 for overall mortality, and from 39.5% to 40.5% for children under one year of age.

The marriage rate per 1,000 inhabitants decreased from 5.4 to 4.8 during the period 1970-1974, as did the rate per 1,000 persons of marriageable age, which went from 22.7 to 19.8. On the contrary, the divorce rate increased; the rate per 10,000 inhabitants went from 4.2 to 5.2 during the period, and the rate per 10,000 couples went from 48.1 in 1970 to 63.6 in 1974.

In the field of education, total enrollment (primary and middle schools, university and others) rose by 79.8%, teaching personnel by 86.6%, and schools by 39.1%. Expenditures for education, as a percentage of the GDP, grew by 44.0% during the period 1965-1974. The percentage of illiterates in the population 10 years of age and over decreased from 30.3% to 20.7% during the period 1950-1970.

Enrollment in the Medical School increased by 440.5% during the period 1971-1975. During the same period, the School graduated an average of 40.6 doctors per year. The Dental School increased its enrollment from 106 to 313, representing an increase of 195.3%, with an annual average of 10.8 graduates. The first group graduated in 1972.

Panama is basically an agricultural and stockraising country, with a strong commercial and stock market activity, and it is beginning to have industrial activity of the extractive type. The total area devoted to agricultural and livestock activities involving more than one hectare grew by 80.6% during the period 1950-1970, representing 2,092,819 hectares in 1970. Analysis of land tenure shows that holdings with title of ownership represented 41.2% in 1970; rented holdings, 6.1%; and holdings without title, 52.7%.

Analysis of land utilization in 1970 shows that temporary and permanent crops represented 15.3% of the area cultivated; seeded grasses, 46%; natural grasses, 8.4%; fallow land, 10.4%; and land classified as other types represented 19.8%. Analysis of agricultural and livestock operations by type of energy used shows that the use of animal power, mechanical power, and a combination of both was 1% in 1950 and 15.6% in 1970. In contrast, human power was the only source of energy used in 99.0% of the operations in 1950, decreasing to 84.4% in 1970. Agricultural activity centers around the production of rice, corn, beans, coffee and tobacco; and productivity increased from 24.5 to 26.2 quintals per hectare. Livestock activities center around the raising of cattle, hogs and fowl; and there has been a sustained growth in the sector's production. In the fishery area, the major activity is the catching of shrimp and of various types of fish, in which there has been an increase of 60.4%.

The production of electrical energy during the period 1966-1975 grew by 168.3%, with a total production of 1,026 billion KWH. Gas production decreased by 43.1%, with a total production of 404 million cu.ft. The telephone network increased by 156.3%, with a total of 129,700 units installed on direct and party lines and in private and foreign exchanges.

During the period 1966-1974, the network of roads grew by 10.4%, totaling 7,322.7 km including the 97.1 km of (corridor) highway located inside the perimeter of the Panama Canal Zone. In 1975, of the total network of roads, 39.9% were dirt roads; 22.8, asphalt; 28.6%, surfaced; and 8.7%, concrete. Asphalt and concrete together represented 31.5%. During the period 1971-1975 the number of automobiles in operation grew by 27.6%, while victims of traffic accidents increased from 23.4 to 34.4 per 10,000 inhabitants. The population 15 years of age or older represented 32.3% of the total in 1971, and 30.5% in 1975; in absolute terms, it increased during the same period by 12.7%. Of this population, 60.7% were classed as economically active in 1971 and 57.3% in 1975, with unemployment rates of 7.6% and 6.6%.

During the period 1966-1975, the dollar value of foreign trade increased by 270.7% for imports (FOB) and by 252.6% for exports (FOB). There was an upward trend in re-exports, which registered an increase of 551.3% by the tenth year of the period (1966-1975). The relative share of the sectors in the GDP for 1975 was the following: manufacturing industries, 15.1%; agriculture, forestry, hunting and fisheries, 16.2%; wholesale and retail trade, 13.3%; public and private services, 14.2%; transportation, storage, and communications, 8.8%; housing, 7.7%; construction, 6.0%; services to the Panama Canal Zone, 6.3%; banking and insurance, 5.7%; and others, 6.7%.

Per capita GDP increased by 34.0% during the 1966-1975 decade, reaching Bs\$685 for the final year of the decade. For the same period, consumption by the public sector grew by 196.9%, and by the private sector by 49.7%, with values of Bs\$146,700,000 and Bs\$712,700,000, respectively. The consumer price index increased by 58.5% over the 10-year period; the most noteworthy increases were in the following areas: food and beverages, which grew by 79.2%; miscellaneous, by 56.9%; and housing and clothing, by 31.9% and 36.8%, respectively. Of the total expenditures by the Government, 14.1% was for education, 6.4% for health, and 0.5% for labor and social welfare.

In the field of social welfare, during the period 1971-1975 the number of people protected by the Caja de Seguro Social grew from 25.9% of the total population to 36.9%, that is, an effective increase of 11.5% in coverage.

The year 1970 marked a new level in registration of dependents who, under the new Law, acquired the right to receive assistance services as the immediate dependents of persons pensioned or retired from government service (wife or companion, children under 10 years of age, and incapacitated children of whatever age). Because of this law, in 1970 there was a 49% increase in registered dependents as compared with the previous year. Children represented the greatest proportional importance, accounting for 82.8% of the total increase in dependents in 1971, and 75.5% in 1975.

Pensions (old age, incapacitation, reduced, and survivor benefits) granted during the period 1971-1975 grew by 58.0%, and their total cost increased by 101.4%. The average unit cost for this type of benefit increased from Bs\$1,018.30 in 1971 to Bs\$1,297.78 in 1975, that is, by 27.4%. It should be pointed out that in 1975 early and special retirement pensions were added to this group, representing 4.8% of the total allocated for pensions. Subsidies (incapacitation, temporary, maternity benefits for participants and for dependents, funerals, maternity layettes, and breast feeding) grew by 61.2% during the same period. Subsidies for occupational hazards began to be granted in 1970, under Cabinet Decree No. 68 of 31 March of that year, which centralized in the Caja de Seguro Social the obligatory coverage for occupational hazards for all government workers and for employees of private enterprises operating in the Republic. This subsidy covers occupational accidents, accidents enroute to or from work, and occupational diseases. The total number of cases subsidized increased from 14,205 in 1970 to 34,807 in 1975, that is, by 145.0%.

For the country as a whole, there was a relative improvement in the monthly wages of public and private employees. In 1970, employees receiving from Bs\$75 to Bs\$99.99 represented 21.6% of the labor force, compared with 11.7% in 1974. This meant a shifting of 45.8% of this group of employees to the category of persons earning more than Bs\$100 per month.

The Ministry of Health, the Caja de Seguro Social and the Instituto de Agua y Alcantarillado Nacional provide prevention, protection and rehabilitation services for human health and for the environment; and the University, with its specialized schools, is charged with training the professionals the country requires. Each agency has its own administrative organization and independent budget, but as regards the provision of services, the Ministry of Health assumes the leadership role with the participation of the Minister of Health as President of the Directing Councils of the other two institutions.

In the field of vector control, there is a vertical program called the National Service for the Eradication of Malaria, which is responsible for activities aimed at the control of malaria and the eradication of the vectors of yellow fever and dengue. Health policy is oriented towards integrating the resources and services provided throughout the country, with the aim of reducing to a minimum the duplications and differences in benefits which various groups of the population had been receiving.

In each of the nine health regions, which correspond to the politico-administrative division of the country, the resources of the Ministry of Health and of the Caja de Seguro Social are combined under a single administrative head, the Regional Health Director, who is under the Director of the Caja de Seguro Social for administrative direction, and for technical matters is under the Minister of Health and his team of specialists. In this way, and following the principle of shared responsibility, both institutions have begun the process of integration, which thus far covers six of the nine regions. The health regions are divided into 18 sanitary areas, each of which includes one or more districts with a minimum population of 20,000 inhabitants; each region has a health institution which offers integrated services to a population which in general has easy access to those services.

The health institutions of the system are grouped into four categories; (a) the integrated medical center, an establishment located in an urban or rural center of population, which carries out a high and broad range of basic preventive and curative activities; in urban areas, the integrated medical center results from the fusion of the local hospital with the health center; (b) the health center, which provides preventive and curative services, usually with an annexed maternity and/or pediatric unit which enables specialized care to be provided to these population groups; (c) the health subcenter, which is under the health center and is staffed by paramedical personnel and local individuals; in a continuous or sporadic fashion it provides limited health care activities resulting from the task of community organization; and (d) the health post, established by Decree Law No. 32 of 17 February 1975, at which minimum health care in rural areas with difficult access is provided by paramedical personnel under the program of extension of coverage.

Countrywide, there are 25 integrated medical centers, including national hospitals in the metropolitan area (two general hospitals, one pediatric and one psychiatric); 20 health centers with annexed facilities; 62 health centers; and 111 health subcenters. In 1975 the total number of hospital beds (excluding those of the General Hospital of the Caja de Seguro Social) was 4,426, of which 67.3% were for adults, 12.3% for mothers, and the remaining 20.4% for children. The distribution of total beds by health regions shows that, in rates per 10,000 inhabitants, first place is held by the Azuero Region with 41.0, followed by Bocas del Toro with 33.7, Panamá with 21.3, Colón with 20.4, Darién with 19.6, Coclé with 16.7, the Metropolitan Region with 12.9 (excluding hospitals of the Caja de Seguro Social), Veraguas with 14.5, and Chiriquí with 11.9. Pediatric beds, with a nationwide ratio of 12.4 per 1,000 children from 0 to 15 years of age, showed the following levels for the health regions: Metropolitan, 22.2; Bocas del Toro, 21.2; Colón, 11.1; Veraguas, 9.8; Chiriquí, 9.2; Coclé, 8.0; Azuero, 5.8; Darién, 4.1; and Panamá, 3.2 (it should be pointed out that the Hospital del Niño serves the child population of the entire country; nevertheless, the rate shown for the Metropolitan Region refers to the population of that group resident in the Region). The number of obstetrical beds per 10,000 women of child-bearing age showed the following situation: countrywide, 16.2; Colón, 23.2; Chiriquí, 18.7; Panamá, 18.1; Metropolitan, 16.0; Darién, 15.1; Azuero (provinces of Herrera and Los Santos), 15.0; Veraguas, 13.0; Coclé, 12.2; and Bocas del Toro, 12.1.

As of 1 July 1975, the human resources of the country showed the following composition. Professional doctors had a nationwide ratio of 4.6 per 10,000 inhabitants, with a maximum of 6.5 in Colón and a minimum of 0.5 in Panamá. It should be pointed out that the Health Region of Panamá includes the regions of Chepo, La Chorrera, and the Indian territory of San Blas. The city of Panamá, which must be differentiated from the Health Region of the same name, is part of the Metropolitan Region.

The ratio for nurses and nurses' aides was 13.4 nationwide, with a maximum of 22.0 in the Azuero Region and a minimum of 5.6 in Veraguas. Dentists had a nationwide ratio of 0.7 per 10,000 inhabitants, with a maximum of 2.5 in the Azuero Region and a minimum of 0.5 in Veraguas. The nationwide ratio for laboratory technicians was 1.4 per 10,000, with a maximum of 3.3 in Colón and a minimum of 0.6 in Coclé.

Other human resources (pharmacists, X-ray technicians, nutritionists, sanitation inspectors, social workers, occupational therapists, health educators, and dietitians) registered nationwide ratios from 0.0 to 0.8 per 10,000 inhabitants.

These ratios refer to human resources working in the health institutions of the sector, excluding persons who work in the services of the Caja de Seguro Social in the Metropolitan, Coclé, Chiriquí, Darién, and Panamá Regions. As of the date of this information (1 July 1975), these regions had not yet been incorporated into the system of integrated services and resources of the Ministry of Health and the Caja de Seguro Social. As regards the total number of professionals in the country, nationwide ratios for the three most important categories are as follows: doctors, 8.3 for every 10,000 persons, with a maximum of 16.6 in the Metropolitan Region and a minimum of 2.5 in Coclé; nurses (excluding nurses' aides) 7.1, with a maximum of 19.0 in the Metropolitan Region and a minimum of 1.4 in Veraguas; and dentists 1.3, with a maximum of 3.1 in the Metropolitan Region and a minimum of 0.8 in Panamá and Darién.

Physical and human resources have been organized on the basis of three line programs, that is: Environmental Health, Maternal and Child Health, and Adult Health, plus a support program, that of Administration.

The environmental health program, which received 11.3% of the total budget allocation (funds of the Central Government, excluding allocations from the Caja de Seguro Social in integrated provinces, and the Fondo de Administración de Inversión) achieved, together with the Instituto de Agua y Alcantarillado Nacional, a broadening of the coverage of providing drinking water to communities from 76.5% of the population served in 1974 to 81.7% in 1975. It should be pointed out that 62.7% of the rural population benefits from this service. Under the heading of latrine construction, 85.3% of the population has been benefited by sanitary systems for sewage disposal. This percentage is 73.1 in the rural area.

The program for the eradication of malaria and of the mosquito which transmits dengue and yellow fever achieved significant progress during the last period. With a total of 666 cases registered, of which 56% came from the Province of Darién, it was possible to interrupt transmission in an area in which close to 80% of the population lives. At present, there are foci in limited areas in the Province of Bocas del Toro, in Jaque in the Province of Darién, in the Province of Colón (excluding the city), and in the San Blas Territory. To the west of the Panama Canal and along the transisthmian highway, the country is considered to be free of malaria infection. As regards the eradication of the *Aedes aegypti* mosquito, the program was able to control existing foci; and the inspections and verifications carried out during 1976 indicate control of the infection; it is calculated that the situation achieved can be consolidated by the end of 1976 or early in 1977.

The maternal and child health program received 19.8% of the total budget allocation. Its activities were directed towards control of growth and development, providing services covering 69% of all children born during 1975, and towards examining preschool children, providing a coverage of 8% (still very low) of the population from one to four years of age.

The vaccination program deserves a separate chapter because it is one of those which achieved greatest success since it was first established systematically. Because of it, as was already pointed out, the country has reported no more cases of poliomyelitis and diphtheria, and the morbidity-mortality rates for diseases preventable by vaccination were drastically reduced to levels which place them outside the 10 primary causes of disease and death.

The maternal subprogram increased its pregnancy control activities, raising the coverage from 51.6% in 1974 to 66.9% in 1975. The frequency of consultation was 3.2 per person under supervision, which represented 80% of the established norm. It should be noted that maternal mortality was reduced from a rate of 1.5 per 1,000 live births in 1965 to 0.9 in 1975. In 1975, care during the puerperium achieved a coverage of 50.9% of mothers, which represented an increase of 27.7% over 1974. Professional care at birth achieved a coverage of 74.8% in 1975, compared with 72.6% in 1974. This represented an increase of 7.6% in the number of births attended.

The Family Planning Clinic enrolled 25,794 active women, 7.0% of the female population from 15 to 44 years of age, of whom 8,894, or 34.5%, were enrolled in 1975. Oral hormones were used by 68% as a contraceptive procedure, and a failure rate of 3% was noted, compared with a 5% rate for those who used intrauterine devices. It is estimated that annually 6% of active women choose the definitive method of salpingectomy. The adult program used 36.8% of the budget allocation, primarily for medical care for outpatients and for hospitalized patients. The nutrition program directed its efforts in the rural area towards promoting the development of community projects for producing basic foods for consumption by the communities themselves. In their first stage, these projects include a supplementary feeding component, which is a program in itself. In those communities with production programs, the duration of this program is limited to the consolidating of production under the programs and its consumption by the community.

Malnutrition is a problem which extends throughout the entire country. According to data from the National Nutrition Survey conducted in 1967, 60% of all children suffer some degree of malnutrition; 48.8% from Grade I, 10.8% from Grade II, and 1.1% from Grade III. Preliminary data from the Survey carried out in 1975 show a less favorable situation in terms of an increase in the relative importance of Grades II and III malnutrition. It should be pointed out, however, that the increased scope of the 1975 survey only indicates a better knowledge of the situation, and not necessarily a worsening thereof.

The dental health program coordinates the efforts of the Ministry of Health, the Caja de Seguro Social, and the Dental School. Under this program the three institutions combine resources to provide care directed basically to preventing maximum damage and the loss of teeth, and to the training of professionals with feelings for the community in the consideration of problems related to the dental health of its people. Three dental clinics are in operation, with the joint participation of government agencies, the community and private enterprise. These clinics offer overall care for the people, from the treatment of caries to extractions, including orthodontia and dental prosthesis. Community response to this type of service has been highly positive.

Community development for more active participation by the people in the formulation and execution of health programs is the tactical objective of the health policy. The establishing, by national law, of health committees with their own juridical personality was the first step in this direction; committees have now been established, made up of community members who assume the responsibility for selecting projects, discussing them with the health authorities, and putting them into execution with economic support from those authorities.

The projects for potable water supply by means of rural watermains and for food production are those which have received the greatest benefits from the community participation.

The extension of health program coverage to the rural area was enthusiastically received and supported by the communities. This is one of the areas of activity on which the Ministry of Health has placed increasing emphasis and devoted more resources.

An important component of the national development policy is the coordination of the various sectors in implementing projects aimed at raising the degree of participation of rural communities in the political, economic and social activities of the nation.

It has become increasingly evident that the coordination of the resources and efforts of the various government and private sector institutions is one of the most important aspirations of the National Government.

PANAMA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	271,085	66.8	250,755	64.3	264,075	62.6
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	116,950	28.8	114,780	29.4	115,680	27.4
=====	=====	=====	=====	=====	=====	=====
COMMUNICABLE DISEASES						
0200 MALARIA	79,355	19.6	90,405	23.1	96,360	22.8
0700 AEDES AEGYPTI-BORNE DISEASES	26,575	6.5	3,000	.8	3,400	.8
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	11,020	2.7	21,375	5.5	15,920	3.8
=====	=====	=====	=====	=====	=====	=====
ENVIRONMENTAL HEALTH SERVICES	112,660	27.8	76,335	19.6	82,870	19.7
=====	=====	=====	=====	=====	=====	=====
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	18,880	4.7	29,355	7.5	33,660	8.0
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	49,000	12.1	-	-	-	-
3200 FOOT-AND-MOUTH DISEASE	44,780	11.0	46,980	12.1	49,210	11.7
=====	=====	=====	=====	=====	=====	=====
COMPLEMENTARY SERVICES	41,475	10.2	59,640	15.3	65,525	15.5
=====	=====	=====	=====	=====	=====	=====
4300 EPIDEMIOLOGICAL SURVEILLANCE	41,475	10.2	59,640	15.3	65,525	15.5
=====	=====	=====	=====	=====	=====	=====
II. DEVELOPMENT OF THE INFRASTRUCTURE	134,865	33.2	139,110	35.7	157,865	37.4
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	99,295	24.5	102,215	26.2	114,755	27.2
=====	=====	=====	=====	=====	=====	=====
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	61,305	15.1	71,435	18.3	76,355	18.1
5100 GENERAL PUBLIC HEALTH SYSTEMS	37,990	9.4	30,780	7.9	38,400	9.1
=====	=====	=====	=====	=====	=====	=====
DEVELOPMENT OF HUMAN RESOURCES	35,570	8.7	36,895	9.5	43,110	10.2
=====	=====	=====	=====	=====	=====	=====
6200 MEDICINE	8,470	2.1	9,735	2.5	11,220	2.7
6300 NURSING	5,010	1.2	3,000	.8	6,460	1.5
6400 ENVIRONMENTAL SCIENCES	8,610	2.1	9,655	2.5	9,460	2.2
6600 DENTISTRY	13,480	3.3	14,505	3.7	15,970	3.8
=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	405,950	100.0	389,865	100.0	421,940	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

PANAMA
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA III CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA III AMRO-5030(PR/WR)	<u>Program Planning and General Activities</u>			50	28,035	50	29,590	50	31,560
	Area Representative Seminar Costs	0.0283	D-1						
AMRO-1330(PR/PG) AMRO-1331	<u>Maternal and Child Health and Family Welfare</u>			36	10,343	36	9,310	36	7,790
	Medical Officer Consultants and Seminars	0.3365	P-5						
AMRO-2030(PR/WR)	<u>Environmental Health Services</u>			105	12,845	90	16,660	100	16,005
	Sanitary Engineer Solid Waste Engineer	0.0849 4.4932	P-4						
AMRO-3130(PR/WR/ AMRO-3131 PG/WT) AMRO-3230	<u>Animal Health and Veterinary Public Health</u>			575	96,624	220	46,684	155	36,695
	Veterinarian	4.4639	P-5						
	Veterinarian	4.0853	P-4						
	Veterinarian	0.4685	P-4						
	Serologist	4.4640	P-4						
	Health Education Specialist	0.4686	P-3						
	Health Education Specialist Local Costs	0.4687	P-3						
AMRO-4130 (PR)	<u>Nursing</u>			90	12,015	95	14,055	95	14,670
	Nurse	0.0891	P-4						
	Nurse	0.3214	P-3						
	Nurse	0.4084	P-3						
	Seminar Costs								
AMRO-4330(PR/WR) AMRO-4331	<u>Epidemiological Surveillance</u>			60	12,470	40	10,055	40	13,045
	Epidemiologist	0.0861	P-5						
AMRO-5330 (PR)	<u>Health Systems - Planning</u>			36	4,685	36	4,905	36	5,125
	Health Planner	0.2031	P-4						
AMRO-5430(PR/WR)	<u>Statistics and Information Systems</u>			36	6,155	36	6,570	36	7,060
	Statistician	4.0810	P-4						
AMRO-5530 (PR)	<u>Management Systems</u>			50	5,435	50	5,705	50	5,975
	Administrative Methods Officer	0.4800	P-3						
AMRO-6030 (PR)	<u>Development of Human Resources</u>			36	2,885	36	4,540	36	4,885
	Health Manpower Officer	0.3627	P-4						
	Total All Programs			1,074	191,492	689	148,074	634	142,810
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PANAMA - DETAIL

PANAMA-0200, MALARIA ERADICATION

The malaria eradication program, initiated by the Government in 1956, has been making very satisfactory progress in recent years. The purpose of this project is to eradicate malaria from the entire country within a reasonable time. With this in view, the present attack measures will be intensified, others will be started against residual foci, and a strict epidemiologic surveillance program will be carried out in consolidation-phase areas to prevent resumption of transmission.

TOTAL		24	24	24	TOTAL	WR	79,355	90,405	96,360
P-5 SANITARY ENGINEER	WR	12	12	12	PERSONNEL-POSTS		71,800	77,100	82,900
4.0552					PERSONNEL-CONSULTANTS		-	3,000	3,400
P-3 ENTOMOLOGIST	WR	12	12	12	DUTY TRAVEL		3,500	6,000	6,000
4.0538					SUPPLIES AND EQUIPMENT		1,745	1,650	1,000
TOTAL		-	1	1	FELLOWSHIPS		2,310	2,655	3,060
CONSULTANT MONTHS	WR	-	1	1					
TOTAL		3	3	3					
FELLOWSHIP MONTHS	WR	3	3	3					

PANAMA-0700, Aedes Aegypti ERADICATION

The purpose of this project is to eradicate Aedes aegypti from the entire country and maintain surveillance at a level adequate for preventing reinfestations.

TOTAL		12	-	-	TOTAL	PR	26,575	3,000	3,400
P-1 SANITARIAN	PR	12	-	-	PERSONNEL-POSTS		24,075	-	-
4.3685					PERSONNEL-CONSULTANTS		-	3,000	3,400
TOTAL		-	1	1	DUTY TRAVEL		2,500	-	-
CONSULTANT MONTHS	PR	-	1	1					

PANAMA-1301, MATERNAL, CHILD AND FAMILY HEALTH

The objective of this project is to give special attention to increasing the roster of pregnant women being monitored, extending the coverage of institutional births, and improving the system of newborn coverage so this may be effected at an earlier age.

TOTAL		2	2	2	TOTAL	PR	11,020	21,375	15,920
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		6	15	6	SUPPLIES AND EQUIPMENT		1,000	2,100	3,000
FELLOWSHIP MONTHS	PR	6	15	6	FELLOWSHIPS		4,620	13,275	6,120

PANAMA-2000, ENVIRONMENTAL SANITATION

The purpose of this project is to strengthen the technical and administrative organization of the environmental sanitation programs, particularly those of the National Water Supply and Sewerage Institute, in order to expand their coverage and improve their effectiveness. In addition, the Ministry of Health's Environmental Health Bureau will receive assistance in carrying out its programs, especially those pertaining to water supply, air pollution, collection and disposal of solid wastes, housing and food hygiene.

TOTAL		3	3	3	TOTAL	PR	18,880	29,355	33,660
CONSULTANT MONTHS	PR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		14	23	23	FELLOWSHIPS		10,780	20,355	23,460
FELLOWSHIP MONTHS	PR	14	23	23					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

PANAMA-3100, VETERINARY PUBLIC HEALTH

This project is designed to provide the Ministry of Agricultural Development with assistance in establishing the bases for an animal health program.

The specific objectives of the project are to establish an efficient technical and health administration infrastructure for the control and eradication of brucellosis, bovine tuberculosis and other zoonoses; and to support the animal health and livestock development programs of the country in order to improve the production and productivity of livestock as regards both milk and meat.

TOTAL		12	-	-	TOTAL	PG	49,000	-	-
CONSULTANT MONTHS	PG	12	-	-	PERSONNEL-CONSULTANTS		43,755	-	-
					SUPPLIES AND EQUIPMENT		300	-	-
					PROGRAM SUPPORT COSTS		4,945	-	-

PANAMA-3200, FOOT-AND-MOUTH DISEASE CONTROL

There is no foot-and-mouth disease in Panama, nor in the Central American countries or the countries of the Caribbean area. However, Panama has common border with Colombia, where the disease is present. The construction of the Pan American Highway in the Darien region offers a constant threat of the spread of the disease to Panama and Central America. These countries are frequently affected by outbreaks of vesicular stomatitis, which is clinically very similar to foot-and-mouth disease.

The countries of this region have asked PAHO/WHO to assist them in conducting programs for the differential diagnosis of these diseases. Accordingly, programs for the epidemiological surveillance of vesicular diseases and for the establishment of a Regional Center for the Diagnosis of Vesicular Diseases for Central America and Panama have been initiated. Their purpose is to prevent the occurrence of foot-and-mouth disease and other exotic vesicular diseases.

TOTAL		12	12	12	TOTAL	PR	44,780	46,980	45,210
P-4 COUNTRY CONSULTANT .0630	PR	12	12	12	PERSONNEL-POSTS DUTY TRAVEL		39,475	41,675	43,905
							5,305	5,305	5,305

PANAMA-4300, EPIDEMIOLOGY

The purpose of this project is to organize an epidemiological surveillance service at the national and local levels to monitor communicable diseases, particularly malaria and other parasitic diseases. Professional and auxiliary personnel needed for this purpose will be trained.

TOTAL		12	12	12	TOTAL	PR	41,475	59,640	65,525
P-4 EPIDEMIOLOGIST .3688	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					PERSONNEL-CONSULTANTS		-	3,000	3,400
					DUTY TRAVEL		2,000	3,000	3,000
TOTAL		-	1	1	SEMINAR COSTS		-	4,000	4,000
CONSULTANT MONTHS	PR	-	1	1	FELLOWSHIPS		-	7,965	11,220
TOTAL		-	9	11					
FELLOWSHIP MONTHS	PR	-	9	11					

PANAMA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The objectives of this project are to promote multisectoral studies with a view to the formulation of national economic and social development policies; cooperate in efforts to coordinate action by the Ministry of Public Health and the Social Security Fund; encourage and promote active participation by the University in the conduct of the country's health programs; and stimulate the expansion of the coverage of health services.

TOTAL		24	24	24	TOTAL	WR	61,305	71,435	76,355
P-5 PAHO/WHO REPRESENTATIVE 4.0546	WR	12	12	12	PERSONNEL-POSTS		51,055	59,735	64,255
G-7 ADMINISTRATIVE ASSISTANT 4.4723	WR	12	12	12	DUTY TRAVEL		2,000	3,000	3,000
					COMMON SERVICES		8,250	8,700	9,100

PANAMA-5100, DEVELOPMENT OF HEALTH SERVICES

The objectives of this program are to promote short- and long-range plans for extensive and active involvement of communities in the definition of their problems and the formulation and implementation of corrective measures; to carry out an active program for the training of manpower at all levels; to provide for a suitable distribution of physical resources among the health programs in the provinces and communities; to foster appropriate development of logistical systems and systems for collection, channeling and analysis of information for decision-making; and to stimulate a more active and efficient coordination among health institutions so as to ensure better utilization of their own resources and those provided by PAHO/WHO under its technical assistance programs.

	FUND	1977	1978	1979		FUND	1977	1978	1979
							\$	\$	\$
TOTAL		2	2	2	TOTAL	WR	37,990	30,780	37,400
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		21	28	30	SUPPLIES AND EQUIPMENT		16,420	-	-
					FELLOWSHIPS		16,170	24,780	30,600
FELLOWSHIP MONTHS	WR	21	28	30					

PANAMA-6200, MEDICAL EDUCATION

The distribution of medical personnel throughout the country is inadequate. To correct this situation and to avoid more serious problems in the future, measures must be taken to block appointments to the urban areas, at least until the remaining areas attain the national standard; to create incentives at the local level which meet minimum professional aspirations; and to promote, in other areas of the Government, policies aimed at raising local living standards. The joint programmed activity of the three institutions responsible for the training and utilization of medical personnel will be encouraged.

TOTAL		11	11	11	TOTAL	WR	8,470	9,735	11,220
FELLOWSHIP MONTHS	WR	11	11	11	FELLOWSHIPS		8,470	9,735	11,220

PANAMA-6300, NURSING EDUCATION

This project is designed to provide support for efforts to adapt curricula to the growing needs of the health programs, as a result of the extension of service coverage, and to improve the teaching staff of the schools.

TOTAL		1	1	1	TOTAL	WR	5,010	3,000	7,460
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		3	-	3	SUPPLIES AND EQUIPMENT		-	-	1,000
					FELLOWSHIPS		2,310	-	3,060
FELLOWSHIP MONTHS	WR	3	-	3					

PANAMA-6400, SANITARY ENGINEERING EDUCATION

The country needs a greater number of professional personnel qualified to prepare and develop national environmental sanitation programs and plans. The demand for professionals is concentrated in the areas of water supply systems, treatment and disposal of home and industrial liquid wastes, solid waste collection and disposal, environmental pollution, and research in sanitary engineering.

This project is designed to provide continuous training and updating in the different branches of sanitary engineering by means of short, intensive courses for professional and auxiliary personnel working in environmental sanitation programs, and to promote research on design parameters for water supply to small communities.

TOTAL		1	1	1	TOTAL	PR	8,610	9,655	9,460
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		3	3	3	SEMINAR COSTS		2,000	2,000	2,000
					SUPPLIES AND EQUIPMENT		1,600	2,000	1,000
FELLOWSHIP MONTHS	PR	3	3	3	FELLOWSHIPS		2,310	2,655	3,060

PANAMA-6600, DENTAL EDUCATION

The School of Dentistry has made substantial changes in its study plans and in their operation. Together with the Ministry of Health it has established dental clinics manned by final-year students and supervised by teachers, to provide dental care to communities in the interior of the country as an important part of the program of study.

TOTAL		1	1	1	TOTAL	WR	13,480	14,505	15,970
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		14	13	9	SUPPLIES AND EQUIPMENT		-	-	3,390
					FELLOWSHIPS		10,780	11,505	9,180
FELLOWSHIP MONTHS	WR	14	13	9					

PARAGUAY

Paraguay is a landlocked country situated in the center of South America between latitudes 19°18' and 27°36' south and longitudes 54°19' and 62°38' west. It covers an area of 406,752 square kilometers. The River Paraguay, which crosses the country from north to south, divides it into two natural regions with different geographic and economic characteristics: the Eastern Region, with an area of 159,826 square kilometers, and the western region, or Paraguayan Chaco, with an area of 246,926 square kilometers. The only highlands in the country are the Sierra de Amambay, with a maximum elevation of 800 meters above sea level, the Sierra de Mbaracayú in the northeastern part of the country, and the Sierra de Caaguazú and Cordilleras in the central eastern part of the country. The hydrographic system consists of the Rivers Paraguay, Paraná and Pilcomayo and their tributaries which form part of the Rio de la Plata Basin. The most important lakes are the Ypoá Lake, with an area of 260 square kilometers, and the Ypacarai Lake, with an area of 80 square kilometers, located in the southern and central part of the Eastern Region. Paraguay is located between the 21 and 24 degree isotherms, with an average annual temperature of 23°C. The torrid zone is to the north of the Tropic of Capricorn and the temperate zone to the south. Most of the territory has a subtropical climate. The average yearly rainfall ranges from 500 mm in the west to 1,700 mm in the east.

According to the 1972 census, Paraguay had a population of 2,357,955 inhabitants. The annual growth rate is 2.6% and is highest in the Amambay, Alto Paraná, Canendiyú, and Caaguazú Departments, which have grown at an average annual rate of 10.4%. The population density for the whole country is 5.8 inhabitants per square kilometer, and ranges from 0.2 inhabitants per square kilometer in Boquerón to 3,301.7 inhabitants per square kilometer in Asunción. Thirty-seven per cent of the population lives in urban areas and 63% in rural areas; 46.3% of the population lives in communities with fewer than 2,000 inhabitants, and 16.4% lives in localities with 100,000 or more inhabitants. The age structure of the population is typical of a young country in full growth, with about 45% of the population under 15 years of age and 6% over 60 years of age. In the light of population growth between census periods, total population for 1978 has been estimated at 2,887,760, and 3,061,824 by 1980. Actual and projected birth, death, fertility and natural increase rates per 1,000 inhabitants have been calculated on the basis of the vital statistics recorded by the Ministry of Public Health and Social Welfare (survey rate) for the population reporting, which is approximately 56%, and for the total population (total rate). Considerable under-registration of deaths (52.3%) and of births (63.8%) limits the usefulness of these figures. However, available data have been used to make the following projections for 1973, based on the rate of 1,000 inhabitants: birth rate, 15.1 (rate based on timely registration) and 33.7 (rate based on total register); death rate, 9.2 (rate based on timely registration) and 10.8 (rate based on total register); natural increase, 5.9 (rate based on timely registration) and 22.9 (rate based on total register); and total fertility rate, 165.2.

The geographic and economic development regions have been formed because of the need for economic integration. The basis for establishing these regional development poles lies in the need for decentralizing economic activity in the capital by attracting people and investments to strategic zones of the country. In accordance with these requirements, the communities of Concepción, Villarrica and Encarnación were selected because they had the basic infrastructure to meet the needs of a developing zone. Later, the cities Pilar, Pedro Juan Caballero, and Puerto Presidente Stroessner were selected. The latter city is on the border with Brazil and is situated in the area where the Itaipú Hydroelectric Dam is being constructed.

In addition to creating development poles, the following development projects were planned: (1) The Integrated Project for Rural Development of the Northern Settlement Axis directed by the Consejo Nacional de Progreso Social in cooperation with agencies comprising this Council. These include the Ministries of Health, Agriculture, Education, Justice and Labor, the Rural Welfare Institute, the Food and Nutrition Education Program and the Secretaría Técnica de Planificación. The following international organizations also cooperate in the program: ILO, FAO, UNESCO, PAHO/WHO, and UNICEF. The project is located along the Liberación Route in San Pedro Department; (2) The Integrated Project for Rural Development of the Eastern Settlement Axis is also sponsored by the Consejo Nacional de Progreso Social in cooperation with UNDESA, ILO, FAO, UNESCO, PAHO/WHO, and UNICEF. It includes Alto Paraná and Canendiyú Departments, as well as part of the Departments of Caaguazú, Caazapa and Itapúa, an area which is part of the Itaipú zone of influence; (3) The National Program for Integrated Rural Development is carried out by the Consejo Nacional de Progreso Social and the National Defense Ministry with recruits from the National Armed Forces. The purpose of this project is to help discharged and selected soldiers enter into civilian life by settling them on the land along both sides of the Mbutuy-Salto del Guairá Route between Juan Ramón Chávez Colony and Curugaty; (4) The Northwestern Development Axis includes the Paraguayan Chaco, an almost uninhabited area which is potentially one of the richest regions in the country; (5) The Triangle Plan encompasses a vast area in southern Paraguay with its vertices in Asunción, Encarnación and Puerto Presidente Stroessner. This region includes approximately 81% of the country's population. It is an agricultural and forestry zone.

The Secretaría Técnica de Planificación, by using available data for 1972, has classified land use in thousand of hectares in the following way: total land area, 40,675, of which 2,000 hectares are agricultural land intended for permanent cultivation; 14,849 hectares are meadows and permanent pastureland; 24,000 hectares are forests; and 345 hectares comprise built up areas, empty lots, or land for other purposes. The economy of Paraguay is based on agriculture, cattle raising and forestry. The farming and cattle raising sector, including forestry, hunting and fishing, provide 35.3% of the GDP. Of the working population, 51.8% is involved in the agriculture and cattle raising sector, indicating that employment in the country is based on rural activities. Important characteristics of the cattle raising and forestry sector are an abundance of land which has only recently been used for production; family farming of small holdings, regardless of whether they supply the domestic market, the foreign market, or industry; the coexistence of small and large farms, and low capital density. The agricultural sector does not fulfill domestic food needs; cattle raising, however, in addition to being the principal export, also satisfies internal demand.

The Government has given significant economic and social emphasis to adequate supplies of electric power in order to reduce the enormous economic burden of importing oil. The Administración Nacional de Electricidad is the institution responsible for the nation's electric energy supplies. The Hydroelectric Dam of Acaray is in full operation and provides 240,000 kw of installed power. The second phase in enlarging this dam, which provides electric power for the entire country, is about to be completed. The Itaipú Hydroelectric Dam, a challenge to progress, is being constructed as a joint venture of the Governments of Paraguay and Brazil. This dam, located on the Paraná River, will be the largest dam in the world, with a total installed power capacity of 12,600,000 kw. The Governments of Paraguay and Argentina will build the Yacyretá-Apipé Hydroelectric Dam, which will utilize the waters of the Paraná River and will have an estimated power capacity of 3,800,000 kw.

The republics of Argentina, Bolivia, Brazil, Paraguay and Uruguay have agreed that in order to achieve harmonious, well-balanced development of the Rio de la Plata Basin, it is necessary to carry out joint, comprehensive studies with a view to implementing multinational, bilateral, and national programs for promoting progress in the region. The Governments of Argentina, Bolivia, and Paraguay had made the same decision previously regarding the development of the Pilcomayo Basin, which is one of the tributary basins of the Rio de la Plata Basin.

The economic and financial situation of Paraguay in 1974 and its future prospects could be considered very favorable, when compared with the past. There are various reasons for this: good international prices for the country's export products; conditions favorable to the expansion of primary production in the country; the Government's deliberate fostering of production; and the gradual completion of the infrastructure. As a result, the GDP grew in the course of the last five years at an average rate of 6.4%. However, in 1974, the GDP grew faster than in the past, expanding at a rate of 8.3% compared with the previous year. The most dynamic economic sectors, which in large measure made this expansion possible, were the production of goods, which accounted for 54.4% of the total increase in value and in which the agricultural sector played a significant role, since, for the second consecutive year, its growth rate exceeded 11%; the forestry sector, which expanded at the rate of 10.3%; and the livestock sector, 6.0%. The growth rate of the industrial sector was 9.7%. The sustained increase in the GDP in the last few years and the almost static population growth has made possible a steady increase in the per capita GDP. In 1974, the per capita GDP was US\$349.00, as compared with US\$305.00 in 1970. This represents an annual cumulative growth of 3.5%.

Of the economically active population in the production and services sectors, 51.76% are in the primary sector, 21.80% in the secondary sector, and 28.96% in the tertiary sector; 2.05% are not in any specific sector and are classified as "unknown." The distribution of the population by production sectors is typical of a developing country in that the primary sector offers the greatest opportunities for employment. Paraguay is in a pre-industrialization period which explains the small proportion of the population in the secondary sector. The majority of the employed population is male (78.4%).

The percentage of literate population is 80.5, with an 84.2 for men and 76.9 for women. During the last decade, literacy has considerably increased and the difference in the literacy rate between men and women has been significantly reduced. Schooling, measured by the number of children registered in the schools, is as follows: 5-14 years of age, 65.4%; 15-19 years of age, 25.0%; and 20-29 years of age, 3.5%. This breakdown corresponds respectively to primary, secondary and vocational schools, and university.

The cities with the highest urban growth rates are Lambaré and Fernando de la Mora, which are located in the area neighboring the Capital. In the interior, Caaguazú, Pilar, Pedro Juan Caballero, and Puerto Presidente Stroessner, which are considered to be poles of development. Seventy-five per cent of the industries and industrial workers are concentrated in Asunción. Industrial growth has occurred, based mainly on primary sector industries. Forty per cent of housing is in urban areas and 60% in rural areas. The average number of residents per dwelling is 5.4, with an average of 5.0 in urban areas and 5.7 in rural areas. Of all dwellings, 46.1% are classified as unsanitary; the percentage in urban areas is 15.4 and in rural areas 64.5. The Instituto Paraguayo de Viviendas y Urbanismo is the institution which constructs housing for low-income families. Only 10% of the country's dwellings have adequate water supply service. In Asunción, the Capital, 49% of the population is served with potable water; in the interior only 5% of the urban population and 3.25% of the rural population have access to potable water services. With respect to sewerage and excreta disposal, Asunción has sanitary sewerage and storm drainage systems for 40% of the dwellings. In the interior, the percentage is very low; 32% of the population has adequate sanitary excreta disposal services through sanitary latrines. There is no treatment for refuse collected in Asunción or in the eight main cities in the interior. Of the total population, 7.0% has public refuse collection services; 18.7% of the urban population receives such services. It has been estimated that 17.4% of the total population, 7.7% of the urban population and 23.1% of the rural population, have other types of refuse collection systems. There is a great deal of soil pollution from final disposal of refuse.

The quality of the water in Asunción Bay has been affected by discharges of sewerage from the city and waste from some industries, mainly slaughterhouses, located along the Bay. Due to the increase in the number of vehicles with internal combustion engines, air pollution in Asunción has increased. Pollution from industrial sources is low because most industries use vegetable base fuels which do not release highly toxic gases. Available food expressed in terms of the average number of calories, and amount of protein per inhabitant per day, is adequate. With respect to calories, the average of 2,776 is above the average amount recommended per inhabitant-day. With respect to proteins, of the total of 72.4 grams, 51%, or 37.1 grams are of animal origin, which is also adequate. This is mainly due to the abundance of meat products.

According to the 1967 Constitution, Paraguay is a unitary republic with a representative democratic government. Executive power is vested in the President of the Republic. Legislative power rests with the Congress, composed of two chambers, one of senators and one of deputies. Judicial power is exercised by the Supreme Court of Justice and by courts and judgeships established by law. The affairs of the Republic are the responsibility of the Ministers of the Executive Branch, who approve the acts of the President of the Republic. There are 11 ministries and several autarchic entities. The Ministry of Public Health and Social Welfare comprises an upper administrative or decision-making level or Ministerial Cabinet; a coordinating level represented by the Dirección General de Salud; advisory and support agencies represented by the Servicios Técnico-Normativos and the Dirección de Administración; and executive agencies, composed of eight sanitary regions consisting of health centers, health posts, specialized hospitals, and social welfare services. For administrative purposes, the country is divided into 19 departments, which are governed by government delegates: 14 in the eastern region and 5 in the western region (Chaco). The Capital is an independent political unit. The departments are divided into districts, and the districts in turn into companies.

General mortality rates as well as specific and selected mortality rates have been calculated on the basis of the population reporting (56%). They are general mortality, 9.2 per 1,000 inhabitants; maternal mortality, 4.6 per 1,000 live births; neonatal mortality, 40.4 per 1,000 live births; infant mortality, 84.2 per 1,000 live births; mortality in children 1-4 years of age, 6.3 per 1,000; and mortality in children under five years of age, 17.0 per 1,000.

In 1973, there was a total of 12,354 deaths in the survey area; 29.0% of deaths from all causes were children under five years of age. Excluding the group of ill-defined symptoms and conditions, the 10 main causes of death for all age groups were cardiovascular diseases, 24.9%; diseases related to inadequate environmental sanitation, 13.6%; acute respiratory diseases, 13.1%; tumors, 8.3%; accidents and violence, 7.7%; diseases of the endocrine system, nutrition-related diseases and diseases affecting metabolism, 5.7%; perinatal disease, 5.4%; tuberculosis, 3.0%; diseases which can be prevented through immunization, 2.6%; and complications occurring during pregnancy, confinement and postpartum, 1.4%. Communicable, infectious and parasitic diseases together are still the principal cause of death (31.8%), mainly affecting children under five years of age (58.6%). Of all deaths, 63.3% were medically certified and 36.7% were not. In children under one year of age 65% of deaths were not medically certified.

Also in 1973, children under five years of age accounted for 11% of the total number of hospital discharges (33,132); the 40-59-year age group accounted for 11.7%; and the 15-39-year age group accounted for 64.8%. This last figure was greatly influenced by discharges for normal births. Excluding the group of ill-defined symptoms and conditions, the ten main causes of hospitalization for all ages were births without complications, 32.5%; other illnesses (including surgery), 22.2%; complications during pregnancy, delivery, and postpartum, 12.3%; accidents, poisonings, and violence, 10.9%; diseases related to inadequate environmental sanitation, 6.4%; acute respiratory diseases, 4.0%; tuberculosis, 2.4%; tumors, 2.3%; endocrine diseases, nutritional diseases and metabolic diseases, 1.5%; and diseases which can be prevented through immunization, 0.7%. Communicable, infectious and parasitic diseases together comprise the third cause of hospitalization (14.6%). Of this group, 41.1% of the hospitalizations are children under five years of age.

Of a total of 151,134 first consultations in 1973, children under five years of age accounted for 41.0% of all external consultations for all causes. Excluding consultations, with healthy individuals and dental examinations, the ten principal reasons for external consultation in all age groups were acute respiratory diseases, 35.0%; endocrine diseases, metabolic diseases and nutrition related diseases, 20.9%; infectious and parasitic diseases, 19.8%; diseases related to inadequate environmental sanitation, 11.7%; cardiovascular diseases, 3.5%; accidents and violence, 3.0%; tuberculosis, 2.3%; causes of perinatal illness, 0.8%; diseases that can be prevented through immunization, 0.7%; and tumors, 0.3%. Communicable, infectious and parasitic diseases as a group are the leading cause of external consultation (69.6%), and children under five years of age accounted for 50.1% of these consultations.

Using the population reporting (56%) as a basis, the rates for diseases which must be reported, per 100,000 inhabitants, are influenza, 1,349.8; venereal diseases, 183.7; tuberculosis, 124.9, and diseases which can be controlled through immunization, 102.0.

Leprosy continues to be a health problem with a morbidity rate of 200.0 per 100,000 inhabitants. There are still cases of leishmaniasis and a few cases of malaria, almost all imported. The malaria morbidity rate has been reduced to zero since 1972. The annual parasite rate in 1974 was 0.04. Diseases such as smallpox and urban yellow fever have been eradicated. Immunization programs with a variable coverage are being developed, and efforts are being made to maintain adequate levels of protection for control and eventual disease eradication.

Due to underreporting, the actual incidence and prevalence of zoonoses are not known. It has been estimated that the prevalence of canine rabies is 108.0 per 100,000 and that bovine paralytic rabies causes annual losses of 30,000 head of cattle. Brucellosis and bovine tuberculosis are considered to be diseases harmful to the cattle raising sector.

Of the 41,750 children under five years of age examined at infant consultation posts of the Ministry of Public Health and Social Welfare in 1973, 7.8% were found to be suffering from malnutrition in the following degrees: grade I, 4.9%; grade II, 2.2%; grade III, 0.7%. Likewise, the Ministry of Public Health and Social Welfare and the Secretaría Técnica de Planificación provided the following indirect indexes of the nutrition situation in 1973: mortality rate for children under five years of age, 17.0 per 1,000; mortality rate in the 1-4-year age group and mortality of children under one year of age, 0.41; percentage of deaths in children under five years of age due to infectious and parasitic disease, 58.6; average amount of protein available per inhabitant-day, 72.4 grams, of which 37.1 grams are animal protein and 35.3 grams from other sources. Despite the seriousness of metabolic and nutrition-related diseases in mortality and morbidity rates, clinical-anthropometric surveys, indirect indicators of nutrition status, and availability of food lead to the conclusion that malnutrition is not as widespread as in other parts of the world. The country, with its resources, could assure a good diet for all of its inhabitants, especially for children under five years of age, a group in which 7.8% showed symptoms of deficiency.

A partial finding of the National Nutrition Survey in 1965 showed a prevalence of goiter of 16.6% in men and 31.4% in women. In 1976, goiter was found in 15.8% of the men and 22.8% of the women in 12 communities of the country. These figures are considerably lower than the 38.5% found in the 5-14-year age group in 1965. During the past ten years, an average of 10,000 to 20,000 tons of salt have been imported annually because the country does not have salt producing plants. Approximately 80% of all salt imported is iodized; iodization of salt for industrial use is not required, but iodization of salt for human and animal consumption was made obligatory by Decree No. 33,299/58.

The Secretaría Técnica de Planificación estimated that life expectancy at birth from 1965 to 1970 was 60.13 years for both sexes and 61.82 years from 1970 to 1975. Life expectancy is affected by the high morbidity and mortality rate from infectious, parasitic, perinatal and nutritional diseases. The most vulnerable groups are children under 15 years of age, especially those under five years of age, and pregnant women, as well as women in confinement and in the postpartum period.

In accordance with the Five-Year Plan 1968-1973, the following health programs are being developed: campaigns against communicable and deficiency diseases; control during pregnancy, confinement and postpartum, and of newborn infants and their complications; development, expansion and perfection of health and social assistance services; training of personnel; and centrally directed control programs. A National Tumor Registry was established to compile, on the basis of clinical, anatomopathological, cytological and radiological diagnosis, data that will make it possible to organize a central registry of all cases of cancer and related diseases that occur in the country. In addition, the Biostatistics Department was organized to improve the quality of information. A program is being carried out to improve the quality of care and to expand the coverage of services for mental diseases, which in 1970 accounted for 5.4% of hospital discharges. Some progress has been made in the field of medical rehabilitation by improving emergency surgery and traumatology services, first aid services, and regional health centers to which patients are referred under the regionalized health services system. The establishment of the Servicio Nacional de Saneamiento Ambiental (SENASA), an agency of the Ministry of Public Health and Social Welfare, has been of great importance for the supply of potable water to the interior of the country and other measures directed at the environment, which tend to return to a hostile state. The most widespread occupational hazards are due to agricultural mechanization and the use of pesticides and insecticides in agriculture. The Central Public Health Laboratory continues to provide the active assistance in communicable disease control.

The health sector comprises three subsectors in accordance with their dependency and means of finance: the public subsector, made up of the Ministry of Public Health and Social Welfare, the Army Medical Corps, the Police Medical Corps, the University, the Municipal Health Services and the Corporación de Obras Sanitarias (CORPOSANA), with financing from the National Government; the semiofficial subsector consisting of the Instituto de Previsión Social (IPS) with its own financing; and the private subsector consisting of private institutions. The Ministry of Public Health and Social Welfare is responsible for promoting general health and medical care, and is thus responsible for implementing, inspecting, and supervising the operation of public and private organizations which provide medical care. The Army Medical Corps is responsible for maintaining the health of people in the Army and the Navy, and for the recovery of the sick and wounded as well as testing of the physical abilities of people entering the Armed Forces. It is also responsible for the health of the civilian population through its civic action programs. The Police Medical Corps provide professional assistance to the institution's staff. In addition to training professionals, the National University provides an invaluable service to the country through the Clinic Hospital and the National Mental Hospital. The University, in cooperation with the Ministry of Public Health and Social Welfare, implements the "rotating interns" program in which university students go out into the field in order to become fully acquainted with health care in rural areas. The Municipal Health Services should, under the law, attend to health problems in each zone by guaranteeing those services which are indispensable for a healthy life for the citizens. CORPOSANA is the agency which, under the law, is responsible for providing potable water, sewerage systems, and storm drainage systems for the entire country. IPS is an autonomous organization with its own legal and financial organization. It maintains relations with the Executive Branch through the Ministry of Public Health and Social Welfare. The country's salaried workers are covered by Social Security for non-occupational illness, occupational accidents and illness, disability, old age and death.

The Comisión Nacional de Coordinación de Salud was established by Presidential Decree in 1968. This agency is responsible for coordinating the Government's health policy activities for the promotion, protection and improvement of the inhabitants' health. Due to lack of action by the Commission, there is no mechanism for intra-sectoral coordination, and intra-institutional coordination is also weak. The Secretaría Técnica de Planificación de la Presidencia is the agency responsible for coordinating sectoral plans and formulating the National Economic and Social Development Plan. There is no national plan for the health sector and, of the institutions which are part of this sector, only the Ministry of Health has a planning unit. There is no system for periodic evaluations of the degree in which the goals stated in the plans have been fulfilled; only the operational goals are evaluated. The statistical system is inadequate and suffers from serious deficiencies in coverage (it does not cover the entire sector), reliability, aptness, and quality of information. Widespread underreporting of births (63.8%) and deaths (52.3%) and incomplete reporting of communicable diseases constitute a serious problem. Health laws are obsolete and are not adapted to modern medical technology. A health code is being developed.

The National Census of Health Manpower, carried out in 1974, confirmed the shortage of professional and auxiliary personnel in this sector. The census recorded 7,837 health workers, of which 44.3% are university level, 19.3% technical level, and 34.4% auxiliaries. The rate per 10,000 inhabitants, according to type of personnel, is doctors, 4.56; dentists, 2.50; nurses, 0.51; technical nurses, 1.01; obstetricians, 0.30; technical obstetricians, 1.03; and nursing auxiliaries, 7.10. There is an excessive concentration of resources in the capital city of Asunción, which has only 16.5% of the population but contains 77.2% of the doctors, 79.6% of the dentists, 78.6% of the nurses, and 53.8% of the obstetricians. There is a low level of production of university-trained professionals in the health field, together with emigration of professionals. Planning, management, and supervision of courses for training human resources at the technical and auxiliary levels are inadequate. There is an urgent need to change the policy for training of professionals in these levels.

In 1974, there were 339 health institutions in the country. There was a total of 3,951 hospital beds with a ratio of 1.54 beds per 1,000 inhabitants. The number of hospital beds is insufficient, especially in the interior of the country. Asunción has 6.2 beds per 1,000 inhabitants while the rest of the country, the interior, has only 0.6 beds per 1,000 inhabitants. The structure of medical care centers is inadequate; 85.5% of the establishments have fewer than 30 beds, resulting in low yields and high costs. Auxiliary diagnostic services are incomplete, and there is a high percentage of institutions (31.4%) whose installations need to be remodeled and which need adequate equipment. Supplies of expendable materials and means of transportation are also inadequate.

Public financing of health services is not sufficient to meet the needs. Expenditures for health during 1974 accounted for 6.0% of the national budget. The Ministry of Health received 1.5% and IPS received 4.5%. The allotment for the Ministry of Public Health and Social Welfare is 3.8% of the Administration's budget. There is a great disparity of per capita health expenditure among institutions: while the Ministry of Public Health and Social Welfare spent \$379.00 (US\$3.06) per capita in 1974, IPS spent \$9,179.00 (US\$72.8).

Health institutions in this sector do not provide total coverage for the population. It is estimated that in 1974 about 600,000 inhabitants in the rural areas lacked health care; the rest of the population (77%) was provided with differing degrees of service. This is due to the existence of institutions in the sector that provide care for carefully defined groups, such as IPS affiliates and the Army Medical Corps and Police Medical Corps beneficiaries. The Ministry of Public Health and Social Welfare covers the low-income population, providing all-round health activities. It is the only institution that has a universal coverage program - the Servicio Nacional de Erradicación del Paludismo (SENEPA). The private sector basically attempts to satisfy the medical care needs of higher income groups. The estimated coverage of the health sector in 1974 was the Ministry of Public Health and Social Welfare, 56%; Army Medical Corps, 10%; Police Medical Corps, 2%; University, 2%, and IPS, 7%. The total coverage of the sector is 77%.

The health policy defined by the Ministry of Health and Social Welfare as part of the country's development policy has established the following general objectives for 1976-1980: (1) to increase life expectancy at birth by 3.43 years up to 63.56 years by 1980. In order to reach this goal, programs will be developed to reduce morbidity and mortality from communicable diseases, mainly those which can be controlled through immunization; diseases related to inadequate environmental sanitation; acute respiratory diseases; tuberculosis; perinatal diseases and complications occurring during pregnancy; confinement and postpartum; and nutrition-related diseases. Priority will be given to children under 15 years of age, especially those under five years of age, and to expectant mothers; (2) to expand health service coverage to the entire population. During the present five-year plan, attempts will be made to provide general health services to 83% of the population. Coverage of the rural communities with fewer than 2,000 inhabitants will increase from 51 to 64%. This will be achieved through primary health services closely connected to the health system. The widely scattered rural population will be served by these same services, implemented with community cooperation. In the zones where malaria transmission has been halted, SENEPA evaluation auxiliaries will be used. Coverage for communities with between 2,000 and 20,000 inhabitants, most of which are rural in nature, will be directed by health centers which are basic, general services dependent on the principal health centers of the program areas. Coverage for communities with 20,000 to 100,000 inhabitants will be entrusted to regional health centers, institutions with both basic and specialized services. Coverage for communities with more than 100,000 inhabitants will be under the direction of general and specialized hospitals which will operate as referral centers for the regional health services system; (3) to contribute to the general development by incorporating the health plan into general development plans in order to increase life expectancy at birth, to increase and improve the labor force, and to improve and control health conditions which will be altered by ecological changes in the areas around large hydroelectric projects. Priority will be given to health activities in the development poles, in settlement areas, and along the borders.

In 1976-1980 the National Health Plan contemplates the organization and improvement of a health system which will coordinate the different institutions in the sector under the regulation and guidance of the Ministry of Public Health and Social Welfare. Strategic and developmental aspects will be given priority. Four levels of care have been established in the health services system of the Ministry of Public Health and Social Welfare: Level I, primary - to provide health care for rural communities with fewer than 2,000 inhabitants and for widely scattered communities; the type of health institution is the health post; Level II, basic - to provide health care for predominantly rural communities with between 2,000 and 19,999 inhabitants; the types of health institutions are "D", "C", and "B" health centers, which have hospital beds; Level III, basic supplementary - to provide health care for communities with between 20,000 and 99,999 inhabitants; the type of health institution is type "A" regional health centers with 30-100 hospital beds; and Level IV, specialized - for communities with more than 100,000 inhabitants; the type of health institution is the general and specialized hospitals. The referral system has been planned according to the degree of complexity of the health services. One of the main activities of Level I, due to its limited resources and functions, is to refer patients to more complex units with medical care (Levels II and III). Level II will refer patients to more specialized units (Levels III and IV), and Level III will refer patients to specialized Level IV.

The Plan also considers health regionalization as the basis for an operational and coordinated network of health institutions with a clear definition of functions in preventive, curative and social aspects of medicine as well as in the urban and rural sphere. Attempts are being made to achieve administrative decentralization with sufficient delegation of authority to allow technical-administrative coordination with the headquarters office, in order to attain adequate geographic coverage as well as adequate coverage for the program and the population and thus efficiently use available resources. In order to implement the Plan, assignment of personnel by type of institution, including regional staff, has been standardized. Education and training of human resources has been planned to assure sufficient numbers of professional staff. The Ministry of Public Health and Social Welfare foresees the education and training of technical and auxiliary personnel which at the present time are not sufficient to meet the Plan's needs. With respect to installed capacity, the Plan provides for a total increase of 52.5% in the number of health institutions, mainly in Level I, which now accounts for 66.6%. The number of hospital beds will also be increased by 1,204.

With respect to health expenditures, the Plan expects a considerable increase of running expenses for the Ministry of Public Health and Social Welfare because in addition to the growth in installed capacity, the allocation - personnel by type of institution, has been standardized, as well as personnel salaries, and consumption costs. The total increase in running expenses from the diagnostic year, 1974, until the final year of the program, 1980, is 335.4%; 160.7% for the Headquarters office and national control programs and 602.6% for the system's health program. The Plan's expected investment expenditures have been calculated by the Ministry of Public Health and Social Welfare at \$3,580,406,200 (US\$28,415,922). Of this amount, 49.3% (US\$14 million) is for investments in sanitation works of the SENASA Program for Concentrated Action, and 50.7% (US\$14,415,922) is for the Program for Extension of Coverage, which includes building, remodeling, and equipping health institutions. These expenses will be financed by an international credit institution. The increase in the budget of the Ministry of Public Health and Social Welfare during the period when the Plan is in the programming stage has also been estimated. Using 1975 as a base, the total increase for the first year is 52.7%. Of this increase, 93.8% pertains to health regions and 10.0% to the headquarters level and investment expenditures. During the last year of the planning period, total increase of the budget will be 172.2%, which is within the ceiling provided for by the Secretaría Técnica de Planificación de la Presidencia. The increase in the budget is higher for the health regions, where it will be as high as 279.8%. The Headquarters level, including national control programs, will only increase 60.7% by 1980; investments will increase by 61.0%. The latter will include only those investments anticipated by the Ministry of Public Health and Social Welfare which are to be made with Government funds.

The Ministry of Public Health and Social Welfare, in order to implement its health strategy and policies, has decided to outline the following 11 programs, which are divided into three areas:

Area 1, expansion of services for people, with eight programs: (1) Rural Health Program. The purpose of this program is to extend health service coverage to the rural areas and organize a minimum program within a regional system through complete primary services and programs for access to rural areas. Such programs will be directed by trained personnel and will be under permanent supervision with community cooperation. Another purpose is to establish the interrelation and definition of the informal and formal institutional health systems, to coordinate health activities among institutions in the sector, mainly with SENEPA, and to establish programs for rural development based on the experiences of interinstitutional projects in order to improve the quality of rural population by attracting the interest of international agencies; (2) Communicable Diseases and Zoonoses Program. The purpose of this program is to decrease morbidity and mortality from communicable diseases and the zoonoses and to maintain the eradication of smallpox through immunization of useful levels of the susceptible population, timely and effective care of patients, control of foci and contacts, encouragement of health education, and establishment of a surveillance system by levels; (3) Maternal and Child Health Program. The objective of this program is to reduce maternal and infant morbidity and mortality rates and to achieve optimum development for mothers and children by developing complete activities for maternal, infant, preschool and school-age health care in order to provide useful coverage; (4) Family Protection Program. The purpose of this program is to develop, strengthen, and stabilize the family so as to contribute to improve the health for each one of its members. This will be done through activities for the control of female genital cancer, family planning, gynecological activities and social work, and education in family life; (5) Nutrition Program. The purpose of this program is to reduce morbidity and mortality due to malnutrition, especially undernourishment, through the control of the nutritional status of children and mothers, by providing food supplements for school-age children and undernourished pregnant women; to control endemic goiter and the iodine level of salt, and to establish coordination between intrasectoral and extra-sectoral agencies participating in the program; (6) Program for Adult Medical and Dental Care. The purpose of this program is to reduce dangers of illness and death of adults through timely and effective medical care and to prevent and treat dental diseases; (7) Social Welfare Program. The purpose of this program is to promote social development of the population through social activities in medical institutions, by providing services in social welfare institutions and private social welfare organizations as well as by promoting community development programs; and (8) Program for Eradication of Malaria. The purpose of this program is to interrupt the transmission of malaria and reduce the incidence of the disease by intensifying application of the measures presently in use in the eradication program and by developing an antimalaria surveillance system in cooperation with the general health services in those zones which have succeeded in interrupting the transmission of the disease. This program will also be responsible for maintaining the eradication of Aedes aegypti through control in areas with a history of infestation.

Area 2, Expansion of Environmental Activities, with one program, the Environmental Sanitation Program, the purpose of which is to obtain adequate water supply and sewerage and excreta disposal services for communities with fewer than 4,000 inhabitants through the construction and operation of potable water systems, through establishment of household water connections and public taps and by construction of hole latrines, sanitary latrines, sanitation units, and water privies.

Area 3, Expansion and Improvement of Activities in the Services Sector, with two programs: (1) Administrative Development Program. The purpose of this program is to find an adequate administrative and financial system in order to achieve previously defined policies and strategies with maximum efficiency by promoting the planning system, organizing a national health system, reforming and standardizing internal administration, establishing a national system of health information, developing operational research activities, and compiling and adapting existing laws and regulations; and (2) Program for Development of Resources. The purpose of this program is to establish adequate processes for better development of human, physical and financial resources within the framework of health policies, strategies and programs through planning; training and education of personnel; registration of physical resources; formulation of an investment plan and preparation of basic modular-type models for each health institution; and a study of the financing of the health sector to serve as the basis in the search for necessary financial resources.

PARAGUAY
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	281,587	54.5	160,195	38.9	175,005	42.7
SERVICES TO INDIVIDUALS	70,830	13.8	74,940	18.2	68,610	16.7
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	7,010	1.4	8,155	2.0	9,060	2.2
0200 MALARIA	47,850	9.3	48,550	11.8	52,550	12.8
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	14,470	2.8	16,235	3.9	7,000	1.7
1700 CHRONIC DISEASES	1,500	.3	2,000	.5	-	-
ENVIRONMENTAL HEALTH SERVICES	202,447	39.1	53,905	13.1	60,340	14.7
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	55,455	10.7	8,655	2.1	12,860	3.1
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	101,308	19.6	-	-	-	-
3200 FOOT-AND-MOUTH DISEASE	45,684	8.8	45,250	11.0	47,480	11.6
COMPLEMENTARY SERVICES	8,310	1.6	31,350	7.6	46,055	11.3
4100 NURSING	8,310	1.6	31,350	7.6	46,055	11.3
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	235,410	45.5	252,965	61.1	234,035	57.3
HEALTH SYSTEMS	225,610	43.6	246,165	59.5	226,735	55.5
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	62,330	12.1	89,140	21.6	92,305	22.6
5100 GENERAL PUBLIC HEALTH SYSTEMS	124,665	24.0	114,485	27.6	89,435	21.9
5400 STATISTICS AND INFORMATION SYSTEMS	3,000	.6	5,000	1.2	5,500	1.3
5500 MANAGEMENT SYSTEMS	35,615	6.9	37,540	9.1	39,495	9.7
DEVELOPMENT OF HUMAN RESOURCES	9,800	1.9	6,800	1.6	7,300	1.8
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	9,800	1.9	6,800	1.6	7,300	1.8
GRAND TOTAL =====	516,997	100.0	413,160	100.0	409,040	100.0

*LESS THAN .05 PERCENT

PAHO-PR-REGULAR BUDGET
PW-COMMUNITY WATER SUPPLY
PA-INCAP - REGULAR BUDGET
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
PG-GRANTS AND OTHER CONTRIBUTIONS
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHO-PO-NATURAL DISASTER RELIEF VOLUNTARY FUND
PJ-GRANTS RELATED TO CAREC
WHO--WR-REGULAR BUDGET
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
WD-GRANTS AND OTHER FUNDS

PARAGUAY
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA VI CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA VI (PR)	<u>Program Planning and General Activities</u>			90	48,055	90	50,945	90	53,950
	Area Representative	0.0310	D-1						
AMRO-1360 (PR)	<u>Maternal and Child Health and Family Welfare</u>			102	11,205	102	16,680	102	17,710
	Medical Officer	0.2117	P-5						
AMRO-4160 (PR)	<u>Nursing</u>			56	4,360	56	6,840	56	7,275
	Nurse	0.0895	P-4						
AMRO-4360 (WR)	<u>Epidemiological Surveillance</u>			102	8,740	102	12,670	102	13,425
	Epidemiologist	4.0846	P-4						
AMRO-5360 (PR)	<u>Health Systems - Planning</u>			110	17,585	110	18,600	110	19,710
	Health Planner	0.0915	P-5						
AMRO-5460 (PR)	<u>Statistics and Information Systems</u>			158	13,360	158	19,555	158	20,865
	Statistician	0.4853	P-3						
AMRO-5560 (PR)	<u>Management Systems</u>			84	11,230	84	11,890	84	12,620
	Administrative Methods Officer	0.4590	P-4						
AMRO-6260 (WR)	<u>Development of Human Resources - Medicine</u>			89	6,065	89	9,395	89	9,900
	Medical Educator	4.3685	P-5						
	<u>Total All Programs</u>			791	120,600	791	146,575	791	155,455

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PARAGUAY - DETAIL

PARAGUAY-0100, COMMUNICABLE DISEASES

The purposes of this project are to achieve a reduction of morbidity and mortality due to communicable diseases and zoonoses by immunizing susceptible population on effective levels; by providing timely and effective care for patients; by controlling foci and contacts; by encouraging health education; and by establishing epidemiological surveillance systems on different levels.

TOTAL		3	3	3	TOTAL	PR	7,010	8,155	9,060
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FELLOWSHIP MONTHS	PR	3	3	3	SUPPLIES AND EQUIPMENT		4,700	5,500	6,000
					FELLOWSHIPS		2,310	2,655	3,060

PARAGUAY-0200, MALARIA ERADICATION

The purposes of this project are to interrupt the transmission of malaria and reduce the incidence of the disease by intensifying the application of measures currently used in the eradication program; by developing an antimalaria surveillance system coordinated with the general services in the zones that have been able to interrupt the transmission of the disease; and by continuing the eradication of Aedes aegypti through control in locations with a history of infestation.

TOTAL		12	12	12	TOTAL	WR	47,850	48,550	52,550
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P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		41,000	44,200	47,700
4.0557					DUTY TRAVEL		1,850	1,850	1,850
					SUPPLIES AND EQUIPMENT		5,000	2,500	3,000

PARAGUAY-1300, FAMILY HEALTH AND POPULATION DYNAMICS

The objectives of this program are to reduce maternal and child morbidity and mortality rates; to achieve the best possible development of mothers and children by developing complete maternal and child, preschool and scholastic health care programs for providing sufficient coverage; to establish, strengthen and stabilize the family unit and to contribute to the improvement of the health and welfare of each one of its members through activities for controlling feminine genital cancer and for family planning, gynecology, social work and family life education; to reduce morbidity and mortality from malnutrition, especially undernourishment, by controlling the child's nutritional level and treating undernourished children, by controlling the nutritional level of pregnant women and treating undernourished mothers; to provide supplementary food for school-age children and undernourished pregnant women; to control endemic goiter and the iodine level of salt; and to establish cooperation between participating intra and extrasectorial agencies.

TOTAL		11	11	-	TOTAL	PR	14,470	16,235	7,000
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FELLOWSHIP MONTHS	PR	11	11	-	SEMINAR COSTS		3,000	3,500	4,000
					SUPPLIES AND EQUIPMENT		3,000	3,000	3,000
					FELLOWSHIPS		8,470	9,735	-

PARAGUAY-1700, CHRONIC DISEASES - CANCER

The objectives of this project are to collect data and record all the information on cases of cancer and related diseases in a national tumor register; to carry out epidemiological research by strengthening the National Register of Tumor Pathology; and to update the skills of the specialists through seminars.

TOTAL	PR	1,500	2,000	-
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SEMINAR COSTS		1,500	2,000	-

PARAGUAY-2000, ENVIRONMENTAL SANITATION

The general purpose of this project is to implement a national environmental sanitation plan in localities with fewer than 4,000 inhabitants, and in rural areas, in order to provide them with suitable water supply and sewerage and excreta disposal services. The specific objectives are to construct and operate potable water systems in approximately 127 localities, including household connections and public faucets in urban and rural centers with fewer than 4,000 inhabitants; to construct and/or repair approximately 20,694 dug wells for serving approximately 50% of the scattered rural population; to construct approximately 67,864 sanitary latrines, 5,894 sanitary nuclei and 29,705 aqua privies for serving 50% of the population included in the program; to train technical and administrative personnel for the program through courses, short courses, and seminars; and to establish a rotating fund for financing the direct costs of the works through loans to the localities.

TOTAL		12	-	-	TOTAL	PR	55,455	8,655	12,860
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P-4 SANITARY ENGINEER	PR	12	-	-	PERSONNEL-POSTS		39,475	-	-
4.4575					PERSONNEL-CONSULTANTS		2,700	3,000	6,800
					DUTY TRAVEL		1,500	-	-
TOTAL		1	1	2	SEMINAR COSTS		-	2,000	2,000
		-----	-----	-----	SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
CONSULTANT MONTHS	PR	1	1	2	FELLOWSHIPS		10,780	2,655	3,060
TOTAL		14	3	3					
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FELLOWSHIP MONTHS	PR	14	3	3					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

PARAGUAY-3100, VETERINARY PUBLIC HEALTH

The purpose of this project is to prepare a technical, financial and economic feasibility study for an animal health program covering foot-and-mouth disease, rabies, brucellosis, tuberculosis and parasitic diseases.

TOTAL	15	-	-	TOTAL	PG	101,308	-	-
CONSULTANT MONTHS	PG	19	-	-	PERSONNEL-CONSULTANTS	67,795	-	-
				DUTY TRAVEL	258	-	-	-
				CONTRACTUAL SERVICES	12,295	-	-	-
				SUPPLIES AND EQUIPMENT	7,500	-	-	-
				PROGRAM SUPPORT COSTS	13,460	-	-	-

PARAGUAY-3200, FOOT-AND-MOUTH DISEASE CONTROL

The country has organized a national campaign for the eradication of foot-and-mouth disease with the aid of an IDB loan. It is also an important producer of foot-and-mouth disease vaccine, supplying a number of other South American countries. This project will help to coordinate the activities of the campaign with those of PANAFOTSA.

TOTAL	12	12	12	TOTAL	45,684	45,250	47,480		
P-4 COUNTRY CONSULTANT .3152	PR	12	12	12	SUBTOTAL	PR	43,050	45,250	47,480
				PERSONNEL-POSTS	39,475	41,675	43,905		
				DUTY TRAVEL	3,575	3,575	3,575		
				SUBTOTAL	PG	2,634	-	-	
				SUPPLIES AND EQUIPMENT	2,634	-	-		

PARAGUAY-4100, NURSING SERVICES

The purposes of this project are to improve the administration and organization of nursing and obstetrical services at the central, regional and local levels; to structure a nursing system in accordance with the objectives of the National Health Plan; and to define the quantity and quality of nursing personnel needed according to the type and level of medical attention it is planned to provide through the local health programs which give priority to community nursing.

TOTAL	-	12	12	TOTAL	PR	8,310	31,350	46,055
P-3 NURSE .4846	PR	-	12	12	PERSONNEL-POSTS	-	23,695	37,495
				DUTY TRAVEL	-	1,000	1,500	
				SEMINAR COSTS	4,000	2,000	2,000	
TOTAL		3	3	3	SUPPLIES AND EQUIPMENT	2,000	2,000	2,000
				FELLOWSHIPS	2,310	2,655	3,060	
FELLOWSHIP MONTHS	PR	3	3	3				

PARAGUAY-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to strengthen the health system; to cooperate with the Government in health planning within the context of social and economic development; and to assist the national health authorities in specifying and programming the activities requiring international cooperation.

TOTAL	24	24	24	TOTAL	PR	51,530	74,140	78,705
P-5 PAHO/WHO REPRESENTATIVE .0563	PR	12	12	12	PERSONNEL-POSTS	36,580	58,590	62,505
G-7 ADMINISTRATIVE ASSISTANT .4724	PR	12	12	12	DUTY TRAVEL	3,200	3,200	3,200
				COMMON SERVICES	11,750	12,350	13,000	

PARAGUAY-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to use the National Health Plan for 1976-1980 as a basis for extending health service coverage to satisfy basic and vital needs, with special emphasis on rural areas and the most vulnerable groups; techniques with a multiplier effect on the practice of preventive and curative medicine will be applied in priority program areas. Other purposes are to organize and improve a health system for coordinating the different institutions of the health sector under the guidance and authority of the Ministry of Public Health and Social Welfare, by giving priority to strategic and developing areas and determining the levels of attention needed as well as establishing a reference system in accordance with the degree of complexity of the services; to strengthen sanitary regionalization in order to construct an operational and coordinated network of health establishments with a clear definition of functions; and to achieve decentralization with sufficient delegation of authority to allow technical and administrative coordination at the central level in order to obtain adequate coverage for the geographic areas, the programs and the population in order to rationalize available resources.

TOTAL	4	5	4	TOTAL	PR	25,770	31,235	31,320
CONSULTANT MONTHS	PR	4	5	4	PERSONNEL-CONSULTANTS	10,800	15,000	13,600
				SUPPLIES AND EQUIPMENT	6,500	6,500	6,500	
TOTAL		11	11	11	FELLOWSHIPS	8,470	9,735	11,220
FELLOWSHIP MONTHS	PR	11	11	11				

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PARAGUAY-5101, HEALTH SERVICES IN DEVELOPING AREAS

The purpose of this project is to extend health service coverage to the rural areas by organizing a minimum health plan as part of a regionalized system. This is to be done through complete primary services and rural-oriented programs directed by trained personnel under constant supervision and with community cooperation; to establish interaction and coordination between the informal health system existing in rural communities and the formal institutional system; to coordinate health activities with the institutions of the health sector, mainly with the Servicio Nacional de Erradicación del Paludismo in the areas where the transmission of malaria has been interrupted; and to establish integrated rural development programs based on the joint experience of government institutions in the Eje Norte de Colonización in order to improve the quality of life for rural populations by attracting the interest of agencies for international cooperation.

TOTAL		12	12	12	TOTAL	PR	52,535	54,580	57,715
P-4 MEDICAL OFFICER .3871	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					DUTY TRAVEL		2,250	2,250	2,250
					SEMINAR COSTS		3,500	2,500	3,000
TOTAL		3	3	3	SUPPLIES AND EQUIPMENT		5,000	5,500	5,500
					FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	PR	3	3	3					

PARAGUAY-5103, EXTENSION OF COVERAGE OF HEALTH SERVICES

The purpose of this project is to draw up a program for the extension of health service coverage in rural areas with a view to strengthening the existing services of the country. It includes technical, economic, institutional and financial feasibility studies, as well as architectural designs, and is intended to be presented to a lending institution for the purpose of obtaining a loan for financing it. Another objective of the project is to prepare a complete plan for the training of professional, middle-level, and auxiliary personnel so as to extend coverage to the rural areas in accordance with the National Health Plan 1976-1980. In preparing this project, national and regional development plans will be taken into account, in particular those for the Alto Paraná where the Itaipu Dam is being constructed, as well as the proposed construction of the Yacyretá Dam.

TOTAL		12	11	2	TOTAL	PG	57,160	43,670	14,000
CONSULTANT MONTHS	PG	12	11	2	PERSONNEL-CONSULTANTS		43,670	43,670	9,000
					LIBRARY ACQUISITIONS		-	-	5,000
					PROGRAM SUPPORT COSTS		13,490	-	-

PARAGUAY-5400, HEALTH STATISTICS

The purposes of this project are to strengthen the statistics unit of the Ministry of Public Health and Social Welfare; to coordinate, at the national level, systems of registration, collection, processing, compilation, analysis and publication of vital and health statistics as a basis for establishing a national information system; to establish and operate demonstration areas; to train personnel; to provide continuing supervision at all levels; and to incorporate the teaching of health statistics into institutions for training health personnel.

TOTAL		3,000	5,000	5,500
SUBTOTAL	PR	-	-	5,500
SEMINAR COSTS		-	-	2,500
SUPPLIES AND EQUIPMENT		-	-	3,000
SUBTOTAL	WR	3,000	5,000	-
SEMINAR COSTS		-	2,000	-
SUPPLIES AND EQUIPMENT		3,000	3,000	-

PARAGUAY-5500, MANAGEMENT OF HEALTH SERVICES

The purpose of this project is to cooperate with the Government in the improvement of the administration of its health services.

TOTAL		12	12	12	TOTAL	PR	35,615	37,540	35,495
P-3 ADMIN. METHODS OFFICER .4692	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
					DUTY TRAVEL		2,000	2,000	2,000

PARAGUAY-6000, DEVELOPMENT OF HUMAN RESOURCES

The objectives of this project are to promote planning of health manpower as an integral part of the overall planning process for economic and social development, as well as part of the planning process in the health sector of the National University of Asunción and in other institutions for training health personnel; to strengthen the teaching-learning process in the schools and faculties of the health sciences (medicine, dentistry, nursing, veterinary medicine and engineering) through the utilization of the most appropriate teaching resources and methods for that purpose; and to create a training center to place greater emphasis on the education of technical and auxiliary personnel and the training of volunteers.

TOTAL	PR	9,800	6,800	7,300
SEMINAR COSTS		6,300	6,800	7,300
SUPPLIES AND EQUIPMENT		3,500	-	-

PERU

The Republic of Peru is situated in the Southern Hemisphere, in the central and western part of the American Continent, on the Pacific Ocean. It has an area of 1,285,215 km² and a total population (1976 estimate) of 16,090,000, with a density of 12.5 inhabitants per km². The increase in population was 3.02% in 1972. There is a strong trend towards internal migration to the cities, particularly Lima, the population of which is increasing at a rate of 7% per year.

An upward surge in the gross domestic product began in 1969 and continued at yearly growth rates averaging 5.5% from 1970 to 1974. In 1975, however, the rate of growth dropped off to 4%, owing mainly to constraints in agriculture, fishing, and mining. Financial problems have also arisen in recent years: savings capacity has declined, and there is increasing use of credit, both domestic and foreign, to cover government expenditures. This deterioration in public finance resulted from the maintenance of consumer subsidy policies and from substantial public investments not fully consistent with the income policy.

Agrarian reform is progressing on schedule. By the end of January 1976 the Government had expropriated 8.4 million hectares, 62% of the land subject to expropriation, and had awarded 6.2 million hectares of land, 64% of the target area. The scope of the reform is restricted by the physical characteristics of the country, which limit the agrarian frontier. It is estimated that the reform has benefited a third of the agricultural labor force, which accounts for 15% of the country's workers.

The rate of unemployment, which had leveled off at about 4% from 1970 to 1974, rose to 5.2% in 1975. In addition, underemployment is estimated at more than 40%.

In mid-June 1976 the Peruvian Government instituted a package of reforms aimed at resolving problems in the external and fiscal sectors. These were directed to improving the position of the fiscal sector, bringing better balance into the external sector, establishing new price and income policies, and promoting internal savings.

The cultural structure of the Peruvian people has been assimilating this serious impact, and a systematic information and motivation program has been brought into play to explain the country's financial situation and the measures adopted. Stress has been laid on the humanistic, liberating, autonomous and nationalistic nature of the Peruvian process. Humanism, projected to the economic field, means converting the economy into a means of improving the quality of human life, from a self-serving system pursuing only profit or the production of non-essential goods. The process is liberating in the sense that, with a sound economic structure and a concerted effort by labor and business, it should be possible for every man and his family to be fulfilled through work. This process has also recently been called autonomous because it is focused on an attempt to resolve the national problems through autonomous decisions responsive to national needs, without in any way disregarding certain basic economic laws that apply to the social system and the geographic area in which the decisions are carried out. This process has also been termed nationalistic because Peru maintains a policy of control over its own national resources, planned allocation of available means, regulation of foreign contributions to development, and orientation of the process of production and consumption on the basis of the country's interests and needs.

In 1973 it was estimated that 68% of the population 15 years and over was literate. It was recognized, of course, that there are cultural restraints on the implementation of social and economic programs and particularly health programs. A significant percentage of the population consists of Indians whose level of knowledge and traditional attitudes and practices limit their participation in social programs.

A rough idea of the health situation can be gleaned from the following indicators for the period 1970-1972: the general death rate was 8.4 per 1,000 inhabitants and the infant mortality rate 101.4 per 1,000 live births. The mortality rate in the 1-4 age group was 17.5%, and the total number of deaths in the under-5 group accounted for 48.4% of all deaths. Mortality in the 45-and-over age groups was 33.1% of the total. The percentage of deaths without medical certification was 33.1%. Deaths from infectious and parasitic diseases accounted for 25.5% of all deaths, and another 2.6% was attributed to undetermined causes.

The Peruvian Government has delineated its policy, purposes, and social and economic objectives in the National Socioeconomic Development Plan for 1975-1978, which calls for structural reforms; broader participation of the people in the country's political, social and cultural life; ideological and economic pluralism; the raising of production levels; improvement of marketing systems; reduction of unemployment; regional development, particularly in the border areas; and development, control and rationalization of the use of natural resources. Special emphasis has been placed on regional development and on provisions for administrative centralization, which has been operative for about two years in various development poles. These are managed by multisectoral regional development committees with a greater or lesser degree of political and administrative authority.

The health policy was delineated in the sectoral objectives for the period 1975-1978 and includes measures for comprehensive health care, control and prevention of communicable and non-communicable diseases and zoonoses, and maternal and child care. The main thrust of the policy is for extension of health services to rural areas and marginal urban areas. Integration of health activities with those of other social and economic sectors is included in the policy and strategy. Both the 1975-1978 National Health Plan and the Two-Year Health Plan for 1975-1976 place the emphasis on delivering health care to underserved population groups and consolidating the regionalization process through administrative decentralization based on the country's 10 health regions.

In line with these general trends, in April 1976 the Health Ministry and PAHO/WHO signed a joint declaration providing guidelines for technical assistance. Its salient points may be summarized as follows: greater support for Ministry of Health programs and activities aimed at strengthening the health services and extending them, particularly into the country's rural communities and neediest areas; renewed emphasis on the priority status of the program for treatment and protection of mothers and children and on health services to satisfy the demand and needs of the community; increased assistance to programs of immunization and epidemiologic surveillance against the country's more widespread diseases; greater support for basic rural sanitation activities; action to support the implementation of programs for the training of health personnel, with emphasis on the training of auxiliaries; and measures to encourage an informed and responsible cooperation of the community in its own development, with the aim of enlisting its participation in the formulation and execution of health programs and any others designed to meet the Peruvian people's aspirations for well-being.

According to the terms of the technical assistance program, which takes account of the policy and strategy of the Health Ministry and PAHO/WHO own priorities, the various programs were grouped under five major headings: development of health services; maternal and child health and family welfare; control of communicable and non-communicable diseases and zoonoses; environmental health; and manpower development and research.

In the area of development of health services consideration is given to consolidation and expansion of the infrastructure and comprehensive integration of health administration and planning activities with a view to coordination and implementation of health policies, extension of coverage, and promotion of improvements in the sector's administrative and financial systems. This heading includes intra- and intersectoral coordination to bring about a concerted approach to programs and activities of all institutions pertaining to or related to the sector. Within this general scheme, the objective in the area of planning and development of health programs is to raise the levels of individual and collective health so as to facilitate and accelerate the process of development. This is to be accomplished by coordinating intersectoral activities, expanding preventive services, developing programs for individual health care with emphasis on mothers and children, and strengthening the planning process, particularly at the regional level for the socioeconomic development poles identified in Peru.

In 1975, Peru had 33,359 hospital beds, 337 hospitals, 533 health centers, and 1,115 health posts. Of these facilities, 103 hospitals, 344 health centers and 994 health posts were operated by the Ministry of Health and the rest by the Social Security Agency, welfare institutions, the Armed Forces, agricultural cooperatives, and other public and private organizations.

A comprehensive health planning process is being instituted in the Northwestern, Eastern, Southeastern and Southern Plateau Regions of Peru with assistance from UNICEF, UNDP and PAHO/WHO. Meanwhile, a process of technical and administrative decentralization and development of community participation activities is under way in the other six health regions. In the Northwestern Region (Piura), a significant program is in progress for the extension of health services to underserved communities. Personnel in various fields and at different levels are being trained for this work, in which UNICEF, UNDP and PAHO/WHO have been cooperating since the beginning of the 70's. As of mid-1976, advisory services have been made available in health administration and planning, sanitary engineering, nursing and nutrition. The Eastern Region (Iquitos) is one of the country's major socioeconomic development poles. Substantial investments in the productive and social fields being made in that region have created high expectations and attracted considerable migration from other parts of the country. The aim of the program in this region is to strengthen and expand the physical infrastructure and complement of human resources to make possible a reduction of morbidity and mortality from communicable diseases and to develop programs, particularly those for mothers, children and the family. UNDP is extending support to the health program as well as to comprehensive development of the region. A multisectoral development committee has been formed and is in operation. A PAHO/WHO medical consultant has been stationed in the region since November 1975, advising on matters of health administration and planning. Some progress has been made in the formulation of activities, identification of resources, and training of personnel in two hospital areas. The Southern Plateau Region (Puno) is given priority because of its status as a less developed area characterized by poor health conditions. The Government, with cooperation from UNICEF and PAHO/WHO, has therefore been planning and implementing multisectoral and health activities, with active assistance from the Development Committee and the communities themselves, in an effort to improve living standards and health conditions, primarily for vulnerable and economically active groups. The Southeastern Region (Cuzco) is another area in which health conditions are unsatisfactory, both in absolute terms and in relation to the country as a whole. Arrangements were made for UNDP assistance during 1977-1980, for which purpose PAHO/WHO cooperated in the formulation of programs for extension of coverage, improvement of services, and training of human resources.

The medical care and hospital administration program was prompted by the need to foster better use of installed capacity and encourage the installation of a system of referrals at various levels, bolstered by support in the teaching and supervisory areas. The program also includes logistical support in the administration of hospital areas, which are encouraged to base their activities outside the hospital so as to achieve better penetration into the family and promote participation of the community in the planning as well as use of services. The comprehensive health care concept, translated into programs involving joint responsibility of institutions, users and educational institutions, is one that merits strengthening. PAHO/WHO has provided consultants in these fields with the understanding that the health authorities will establish their terms of reference in accordance with decisions made at the highest level.

The objective of the oral health program is to develop preventive, rehabilitation and social programs. This will require extension of services to the communities through extramural activities based on the use of small teams of personnel and medical staff and on actions for the prevention of dental caries and the utilization of products to avert dental caries and obviate the need for extractions.

Regarding the mental health program, the changes in Peruvian communities, associated with urbanization and internal migration to the cities, have created mental problems of an undetermined magnitude that needs to be measured. It is also necessary to revamp the training of general physicians and nurses and teach them simple procedures and methods to facilitate diagnosis and treatment of mental health cases. More trained personnel are needed to support the improvement and expansion of installed capacity.

Mortality due to cancer was the fourth cause of death in 1970, the most frequent tumors being gastric, uterine, lung and breast. The principal aim of the program is the prevention and treatment of cervico-uterine cancer, through the taking of smears, training of cytotechnicians, extension of the preventive and curative program through the participation of the health infrastructure, teaching institutions and the community, to promote diagnosis and early treatment as well as follow-up of detected cases.

The programs of health statistics and health information systems are being developed as part of the infrastructure with a view to providing these important decision-making tools to the various service programs. The health services administration program is designed to improve the operating capacity of the health sector through development of its organization, methods, procedures and administrative systems. Encouragement is being given to the training of administrative staff to operate at the headquarters of the various health regions in accordance with the general guidelines of the national administrative reform.

The maternal and child health and family welfare area includes the maternal and child health and nutrition programs. The Peruvian Government's population policy, delineated in 1976, calls for a comprehensive view of the problem and for family size to be determined freely and responsibly by the parents in each case. The policy was decided upon after studies of the current status of major aspects of the population, such as those pertaining to demography, socioeconomic characteristics, food and nutrition, health, education and culture, as well as the influence of the family in determining behavioral patterns and cultural values. The actual shaping of the population policy, that is, the individual decisions affecting total size, age structure and location of the population and the extent of changes in these respects, depends on the individuals involved. An integrated and realistic approach is being taken to the demographic problem, one that goes beyond the effects to the causes in an endeavor to find solutions which are both effective and ethical, that is, humane. The population policy is part of the overall development policy, which implies that the latter determines its content and essential directions and that the entire group of statements and purposes making up the population policy will consistently and harmoniously complement and strengthen those provisions of development policy specifically pertaining to population.

The population policy has the following objectives: to achieve a rate of population growth which is consonant with the freely-taken decisions of the population as to family size and supports the efforts of the Peruvian society to attain those levels of human development to which it aspires; to bring about a significant reduction in morbidity and mortality, particularly among mothers and children, that will make it possible to improve the quality of life and increase life expectancy for the entire population; and to achieve a better distribution of the population over the country's territory, consistent with the goals of regional development and national security.

General technical standards are being prepared, for which the National Health Commission is responsible. A companion commission has been set up in the education sector with a view to coordinated action between the two in the creation of a multisectoral group. This program is receiving advisory assistance from PAHO/WHO in various fields, and the authorities intend to present a program to the UNFPA. Food supplement activities for the most vulnerable groups will be integrated into the nutrition program by arrangement with the Ministerio de Alimentación. The program also includes monitoring of nutrition levels and promotional activities for production, marketing and consumption of low-cost, highly nutritious foods.

Included within the area of control of communicable and noncommunicable diseases and zoonoses are the programs for communicable diseases (smallpox, malaria, Chagas' disease); noncommunicable diseases (particularly arterial hypertension and rheumatic fever); the zoonoses programs, especially those against brucellosis, foot-and-mouth disease, rabies, hydatidosis, and the laboratory services and the national health institutes.

Communicable, infectious and parasitic diseases head the list of causes of death, particularly among children under five years of age. The most frequent causes of death from diseases preventable by vaccination have been whooping cough, measles and tetanus. Smallpox and *Aedes aegypti* are considered eradicated. Triatomic infection is quite widespread; there is a focus of plague in the Northwestern Region and one of leprosy in the Eastern Region. Tuberculosis is considered the sixth cause of death: in 1972 it accounted for 4,307 deaths, and the tuberculosis morbidity rate for 1974 was 100 per 100,000 inhabitants among the population surveyed. There are outbreaks of yellow fever, hepatitis and leishmaniasis, although limited in geographic scope. Control of communicable diseases in the Peruvian population requires adequate immunity levels through DPT, BCG, poliomyelitis and measles vaccination. It also requires a system of epidemiologic surveillance which integrates all the health services at appropriate working levels.

The malaria eradication program, begun in 1957, has made significant headway. Transmission has been interrupted, and areas in which nearly 4 million people currently live (73% of the population of the malarious area) have been brought into the consolidation and maintenance phases. Malaria incidence was estimated at 308 cases per 100,000 inhabitants at the beginning of the campaign. It dropped in 1968 to 45 cases, but then rose to 260 cases per 100,000 inhabitants by 1975. Conventional field operations have been maintained and arrangements are being made for an epidemiologic review of the program to gain a better knowledge of the malaria situation by zones and areas and define appropriate strategies and action priorities.

The problem of noncommunicable diseases, such as arterial hypertension and rheumatic fever, is taking on special importance because of the effect of these diseases on human health and the economy. A better understanding of the epidemiologic situation is being acquired through studies aimed at defining a nationwide program. The more prevalent zoonoses are being brought under control through programs for improvement of serologic diagnosis, identification of strains, research and epidemiologic surveillance. In the case of rabies the aim of the program is to prevent human cases and control its incidence in animals, particularly canines, through expansion of the coverage of vaccination drives and through clinical and laboratory diagnosis, epidemiologic reporting and surveillance, early medical treatment of persons exposed to the risk, and information to the community on this hazard. In regard to hydatidosis, the program is directed to controlling canine equinococcus, reducing the risk of transmission to man, preventing food spoilage, and increasing livestock production. There are also programs for controlling zoonoses affecting both humans and animals, such as brucellosis, cysticercosis, distomiasis, and equine encephalitis. The foot-and-mouth disease control program is acquiring special significance because of the hemisphere-wide program that has been advancing in almost all of the countries, together with the fact that Peru is one of the countries where elimination of this disease within a relatively short term is considered feasible. The work being done in the Ministerio de Alimentación with support from the IDB and technical assistance from PAHO/WHO is furthering the achievement of this goal.

The objective in the laboratory service program is to define a national policy for laboratories as well as blood banks, directed to the preparation of standards for strengthening and expanding services, adapting laboratories to the new regional scheme of organization, and developing applied research work. The laboratory system is being extended to the health regions under a program for identification of human and physical resources and training of professional and technical staff. This new structure is intended to be made part of the epidemiologic surveillance system.

The national health institutes are the reference framework and apex of the laboratory system, and also perform certain functions in the setting of technical standards, acting as a reference center. In addition, they are responsible for production and control of biologicals and vaccines and are active in the training of personnel and the conduct of research in the health field. The institutes have obtained a loan from the IDB for a program which is restricted in its implementation; these institutes are receiving technical assistance from PAHO/WHO.

The environmental health area includes the ongoing programs in environmental sanitation, water supply and sewerage, and environmental hazards and control. Only 10% of the rural population receives water through house connections, in contrast to 59% of the urban population so served. In regard to sewerage, 50% of the urban population and only 0.2% of the rural population lives in houses with sewer connections. Special importance is, therefore, being given to water supply and sewer services and their social, technological and economic implications. This has led, at least in larger cities and rural communities, to the development of programs of investment in water supply and sewerage, for which the IDB has extended financial support. Out of 300 urban communities with more than 2,000 inhabitants, only 55 have public garbage collection service. The program calls for the implementation of a national urban sanitation plan including not only the collection and removal of garbage but also its final sanitary disposal, the training of personnel, and the establishment or strengthening of agencies responsible for these services.

The problem of air pollution is confined to the larger and more developed cities, such as Lima, Arequipa and Trujillo. Here, the purpose of the program is to improve environmental health conditions for the population exposed to this hazard through activities oriented to defining a policy and basic legislation, as well as planning for the training of human resources. Radiation protection, both for equipment operators and users, requires the adoption of measures to prevent unnecessary exposure to ionizing radiations. PAHO/WHO is assisting in the establishment of a national program for this purpose. In regard to occupational health, activities are under way in the relevant Institute for the basic purpose of training its professional and technical staff and updating their knowledge.

Concerning the program area of human resources and research, it is important to note that the present ratios per 10,000 inhabitants are 5.9 physicians, 1.9 dentists, 3.7 nurses, and 10.3 nurses' aides (1972). The concentration of these resources in urban centers places a serious constraint on the rest of the infrastructure. Furthermore, the training of physicians, dentists and nurses, based essentially on university programs whose curricula are not designed to meet the country's requirements and with only a limited component of social motivation, with little communication between the training institution, potential employers in this sector, and users at the family and community level, places a serious restriction on the use of a potential installed capacity of human resources.

There are a number of training programs in various fields (medicine, dentistry, nursing, sanitary engineering and veterinary medicine) in addition to those conducted in association with the School of Public Health, the regionalization of instruction and medical care services, and the training of health auxiliaries. As part of educational reform, secondary vocational education schools have been set up by the Minister of Education with programs leading to a degree of Associate in Health.

There is strong motivation for the training of auxiliary and empirical personnel at regional and local levels. As a result of the efforts being made, it is expected that close to 1,000 health auxiliaries have taken refresher courses in the last two years. Plans are also being made for the training and recruitment of empirical health workers and for enlisting the cooperation of rural teachers in health matters.

The Peruvian Government has established a program of compulsory civil service whereby graduates of university programs are required to serve within the health infrastructure, at the local level, for a period of 6 to 12 months after completing their studies. This program became operative a year ago, and 1,450 graduates are now fulfilling this obligation in the health regions, hospital areas and health centers.

Integrated educational development groups are being set up to coordinate health manpower training policy, as determined at decision-making levels in the Health and Education Ministries and Peruvian universities, in such a way as to build up a consolidated program responsive to the country's needs. With technical assistance from PAHO/WHO, an extensive program is under way to adjust training capacity at various levels to manpower demand and requirements.

Research programs, other than those included in specific program areas and forming part of regular activities (essentially operational studies), include, notably, the work being done at the Center for High-Altitude Physiology and Pathology, which was made a separate program in 1976. This program brings together the efforts of agencies of two Peruvian universities to coordinate studies and instruction on the health implications of living continuously in a low-oxygen environment. It is estimated that more than 40% of the population of Peru lives at altitudes of more than 3,000 meters above sea level.

The Government of Peru is making a determined effort to formulate a General Health Bill with the assistance of representatives of the sector and with the active participation of professional and trade associations. It was hoped that this would make it possible to present, during the second half of 1976, a document for general analysis serving as an introduction to a definite legislative proposal to reformulate health policy, strategy and priorities under a comprehensive plan, possibly entailing the definition of a national health system based on coordinated actions and individual professional practice. PAHO/WHO is contributing to this work as and when its assistance is required by the Committee.

PERU
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	539,843	54.4	308,410	35.3	321,890	37.1
SERVICES TO INDIVIDUALS	180,251	18.2	115,835	13.3	117,200	13.6
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	35,656	3.6	30,700	3.5	30,800	3.6
0200 MALARIA	65,095	6.5	68,135	7.9	71,325	8.2
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	64,600	6.5	-	-	-	-
1500 MENTAL HEALTH	5,700	.6	6,500	.7	6,250	.7
1600 DENTAL HEALTH	5,700	.6	6,500	.7	5,750	.7
1700 CHRONIC DISEASES	3,500	.4	4,000	.5	3,075	.4
ENVIRONMENTAL HEALTH SERVICES	215,155	21.7	151,650	17.3	161,635	18.6
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	52,275	5.3	57,595	6.6	64,750	7.5
2100 WATER SUPPLY AND EXCRETA DISPOSAL	3,000	.3	4,655	.5	4,750	.5
ENVIRONMENTAL POLLUTION						
2400 AIR POLLUTION	8,510	.9	7,055	.8	9,060	.9
2500 RADIATION AND ISOTOPES	4,100	.4	4,855	.6	6,060	.7
3000 OCCUPATIONAL HEALTH	5,310	.5	5,655	.6	6,310	.7
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3200 FOOT-AND-MOUTH DISEASE	121,530	12.2	43,675	5.0	45,905	5.3
3300 ZOONOSSES	20,430	2.1	28,160	3.2	25,800	3.0
COMPLEMENTARY SERVICES	144,437	14.5	40,925	4.7	43,055	4.9
4100 NURSING	33,615	3.4	35,540	4.1	37,495	4.3
4200 LABORATORIES	110,822	11.1	5,385	.6	5,560	.6
II. DEVELOPMENT OF THE INFRASTRUCTURE	454,504	45.6	564,641	64.7	542,865	62.9
HEALTH SYSTEMS	371,350	37.2	491,266	56.3	474,775	55.1
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	46,120	4.6	-	-	-	-
5100 GENERAL PUBLIC HEALTH SYSTEMS	242,135	24.3	403,361	46.3	393,155	45.6
5200 MEDICAL CARE SYSTEMS	48,155	4.8	50,785	5.8	53,480	6.2
5400 STATISTICS AND INFORMATION SYSTEMS	22,620	2.3	23,810	2.7	14,620	1.7
5500 MANAGEMENT SYSTEMS	12,320	1.2	13,310	1.5	13,520	1.6
DEVELOPMENT OF HUMAN RESOURCES	75,454	7.6	65,375	7.5	59,690	6.8
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	8,000	.8	6,500	.7	6,500	.8
6100 PUBLIC HEALTH	12,240	1.2	13,620	1.6	13,180	1.5
6200 MEDICINE	12,000	1.2	12,700	1.5	12,950	1.5
6300 NURSING	18,000	1.8	19,000	2.2	15,000	1.7
6400 ENVIRONMENTAL SCIENCES	3,500	.4	6,355	.7	4,560	.5
6500 VETERINARY MEDICINE	3,500	.4	3,600	.4	3,750	.4
6600 DENTISTRY	20,214	2.0	3,600	.4	3,750	.4
PHYSICAL RESOURCES	7,700	.8	8,000	.9	8,400	1.0
7400 MAINTENANCE OF HEALTH CARE FACILITIES	7,700	.8	8,000	.9	8,400	1.0
GRAND TOTAL	994,347	100.0	873,051	100.0	864,755	100.0

*LESS THAN .05 PERCENT

PERU
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA IV CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA IV (PR)	<u>Program Planning and General Activities</u>			90	61,255	90	64,870	90	67,950
	Area Representative	0.0294	D-1						
AMRO-1440 (WR)	<u>Nutrition</u>			140	19,240	140	20,745	135	21,685
	Medical Officer	4.0877	P-4						
AMRO-2940 (PR)	<u>Regional Development</u>			190	28,645	195	31,095	190	31,995
	Sanitary Engineer	0.4266	P-5						
AMRO-3140 (WR)	<u>Animal Health and Veterinary Public Health</u>			195	19,085	185	27,435	185	29,695
	Veterinarian	4.3088	P-4						
AMRO-4140 (PR)	<u>Nursing</u>			260	36,060	255	37,365	265	41,160
	Nurse	0.0893	P-4						
AMRO-4240 (PR)	<u>Laboratories</u>			190	26,815	190	28,415	180	28,530
	Laboratory Adviser	0.4383	P-5						
AMRO-4340 (PR)	<u>Epidemiological Surveillance</u>			255	40,565	260	43,480	260	45,700
	Epidemiologist	0.2028	P-5						
AMRO-6040(PR/WR)	<u>Development of Human Resources</u>			455	63,950	435	68,160	440	72,445
	Medical Educator	0.3401	P-5						
	Nurse Educator	4.4046	P-4						
	Total All Programs			1,775	295,615	1,750	321,565	1,745	339,160
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU - DETAIL

PERU-0100, COMMUNICABLE DISEASES

The purpose of this project is to carry out a program of simultaneous vaccinations in 1977, 1978 and 1979 and, in 1980, only to vaccinate the children born in that year; to establish in 1977 a tuberculosis control program in two health regions, Puno and Iquitos; and to encourage the authorities to undertake a plague and Chagas' disease control subprogram.

TOTAL		1	1	1	TOTAL		35,656	30,700	30,800
CONSULTANT MONTHS	WR	1	1	1	SUBTOTAL	PG	2,786	-	-
TOTAL		21	20	20	SEMINAR COSTS		2,786	-	-
FELLOWSHIP MONTHS	WR	21	20	20	SUBTOTAL	WR	32,870	30,700	30,800
					PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		4,000	6,000	7,000
					SUPPLIES AND EQUIPMENT		10,000	4,000	-
					FELLOWSHIPS		16,170	17,700	20,400

PERU-0200, MALARIA ERADICATION

The program activities which begun in 1957, succeeded in interrupting malaria transmission and in incorporating into the consolidation and maintenance phases a territory currently containing 3,890,502 inhabitants, i.e., 73% of the population of the malarious area. Beginning in 1969, there was a gradual deterioration of the situation accompanied by an increase in transmission in the area in the attack phase and the occurrence of outbreaks in the areas in the consolidation and maintenance phases. In subsequent years, activities were aimed at interrupting and limiting transmission in the area in the attack phase and preventing the reintroduction of cases into the areas in the consolidation and maintenance phases.

This program continues to face difficulties due to lack of funds, shortage of professional personnel, and limitation in their training, increase in the cost of materials and equipment, procurement of the necessary insecticide, and replacement of transportation.

TOTAL		12	12	12	TOTAL	PR	65,095	68,135	71,325
P-4 MEDICAL OFFICER .1051	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
TOTAL		6	6	6	DUTY TRAVEL		2,500	2,650	2,800
FELLOWSHIP MONTHS	PR	6	6	6	SEMINAR COSTS		3,500	3,500	3,500
					SUPPLIES AND EQUIPMENT		15,000	15,000	15,000
					FELLOWSHIPS		4,620	5,310	6,120

PERU-1300, MATERNAL AND CHILD HEALTH

The statistics reveal that maternal and child mortality is high and that, in the case of infant mortality, there is substantial underregistration. A high proportion of the deaths in childhood are due to communicable diseases, infectious diseases of the respiratory apparatus, and diarrheal diseases.

The adoption by the Government of a population policy within the context of development has created optimum conditions for the conduct of an integrated maternal and child health and family planning program. In addition, the establishment of the Ministry of Food in January 1975, opens up new prospects for the solution of the food and nutrition problem of the maternal and child population. These two developments made it possible to formulate a technical cooperation program to be financed by UNFPA and PAHO/WHO.

The purpose of this project is to raise the level of health of the maternal and child population and to bring population growth more in line with the stated development policy. Its immediate objectives are to reduce the levels of maternal and child morbidity and mortality; to monitor and improve the nutritional status of mothers and children; and to provide families with fertility and sterility information and services.

TOTAL		6	-	-	TOTAL	WR	16,200	-	-
CONSULTANT MONTHS	WR	6	-	-	PERSONNEL-CONSULTANTS		16,200	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-1301, HEALTH AND POPULATION

In 1976 the Government of Peru adopted a population policy which was incorporated into the National Development Plan for 1975-1978. Within the Ministry of Health, a commission was appointed and given the responsibility of developing programs to implement this new policy in the health sector. The strategy is to identify the need to promote activities contributing to responsible parenthood by providing couples with the opportunity to freely determine the size of their families.

The project is presently in its preparatory phase and is designed to enable the Government to develop a well-balanced long-range program. The health services infrastructure is being strengthened to provide family planning services, especially in regional hospital areas.

Immediate activities are directed towards informing and motivating community groups; training of health personnel; and providing family planning services in selected urban localities.

The figures below represent the approved budget for February-April 1977. As this is written, additional funding of approximately \$265,000 is being considered by UNFPA for the balance of the year.

TOTAL	UNFPA 48,400	-	-
CONTRACTUAL SERVICES	2,500	-	-
SEMINAR COSTS	7,000	-	-
SUPPLIES AND EQUIPMENT	31,000	-	-
MISCELLANEOUS COSTS	500	-	-
LOCAL PERSONNEL COSTS	7,400	-	-

PERU-1500, MENTAL HEALTH

As yet there is no clear definition of a national mental health policy. Resources are insufficient to meet the demand for mental health services; 25.4% of the cases are in the population under 15 years of age and 72.8% in the population over 15 years of age. There is a concentration of resources in Lima. The number of patients in institutions belonging to the Ministry of Health and Charity is 0.22 per 10,000 population.

The purpose of the project is to assist in extending promotion, protection, recovery and rehabilitation in mental health to a larger number of inhabitants through the development of an integrated health infrastructure, the use of additional qualified human resources, and broad participation by the community.

TOTAL	1	1	-	TOTAL	WR	5,700	6,500	6,250
CONSULTANT MONTHS	WR	1	1	-	PERSONNEL-CONSULTANTS	2,700	3,000	-
				SEMINAR COSTS	3,000	3,500	6,250	

PERU-1600, ORAL HEALTH

The national oral health infrastructure is not sufficiently developed to meet the demand of the population for oral disease prevention and treatment. The situation is worsened by the shortage of specialized personnel, especially dental assistants, and by the lack of dental care equipment, especially in the shantytowns and rural areas of the country.

The purposes of this project are to assist the Government in developing the oral health service infrastructure at the national and regional level; to train personnel, especially auxiliaries; and to promote the local production of equipment and the quality control of dental materials.

TOTAL	1	1	-	TOTAL	WR	5,700	6,500	5,750
CONSULTANT MONTHS	WR	1	1	-	PERSONNEL-CONSULTANTS	2,700	3,000	-
				SEMINAR COSTS	3,000	3,500	5,750	

PERU-1700, CANCER CONTROL

Because of the large number of deaths it causes, cancer ranked fourth among the leading causes of death in 1970. Cancer morbidity is also considerable, the annual incidence being approximately 105 per 100,000 and 72 per 100,000 in females and males, respectively. The mortality rate is 65 per 100,000 in females and 72 per 100,000 in males. The most frequent sites for both sexes were stomach, uterus, lungs and breasts, cervical cancer accounting for 34% of all the cases diagnosed and approximately 70% of all malignant tumors in women. The prevalence of cervical cancer in women over 20 years of age in the period 1972-1976 was 500 per 100,000.

The purposes of this project are to reduce morbidity and mortality due to cervical cancer. To that end, it is planned to conduct multisectoral, multiprofessional and community educational activities for the purpose of disseminating preventive concepts to the population; to continue to collect cervical specimens on a regular basis; to establish a system for the registration, follow-up, and monitoring of detected cases; and to train the necessary specialized personnel at all levels.

TOTAL	WR	3,500	4,000	3,075
SEMINAR COSTS		3,500	4,000	3,075

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-2000, ENVIRONMENTAL SANITATION

The purpose of this project is to formulate and conduct programs for the pollution control of water basins, coastal waters and other water courses; to improve the water quality of public water supply systems and to use low cost sewerage for the irrigation of cropland; and to increase the coverage of services for the collection, transportation, and final disposal of solid waste in urban centers with more than 2,000 inhabitants.

TOTAL		24	24	24	TOTAL	PR	52,275	57,595	64,750
P-4 SANITARY ENGINEER .0581	PR	12	12	12	PERSONNEL-POSTS		45,655	48,285	50,980
G-4 CLERK-STENOGRAPHER .0865	PR	12	12	12	PERSONNEL-CONSULTANTS		-	-	3,400
					DUTY TRAVEL		2,000	4,000	4,250
					FELLOWSHIPS		4,620	5,310	6,120
TOTAL		-	-	1					
CONSULTANT MONTHS	PR	-	-	1					
TOTAL		6	6	6					
FELLOWSHIP MONTHS	PR	6	6	6					

PERU-2100, WATER SUPPLIES

Since the policy of the Government is "to increase activities designed to provide each family with access to suitable housing and the pertinent services, priority attention being given to families whose accommodation is substandard", the principal objective of the enterprises has been to improve and expand water supply and sewage disposal services. Accordingly, this project seeks to strengthen national water supply and sewage disposal services by dealing with their main technical and institutional problems.

TOTAL		-	3	-	TOTAL	WR	3,000	4,655	4,750
FELLOWSHIP MONTHS	WR	-	3	-	SEMINAR COSTS		3,000	2,000	4,750
					FELLOWSHIPS		-	2,655	-

PERU-2400, AIR POLLUTION

This project is designed to support a Government program at the national level in order to improve the physical, mental and social well-being of the population exposed to air pollution, in which special attention is given to its causes, effects, scope, and methods of prevention and control.

TOTAL		3	3	3	TOTAL	PR	8,510	7,055	8,060
FELLOWSHIP MONTHS	PR	3	3	3	SEMINAR COSTS		3,500	2,000	-
					SUPPLIES AND EQUIPMENT		2,700	2,400	5,000
					FELLOWSHIPS		2,310	2,655	3,060

PERU-2500, RADIATION PROTECTION

The purpose of this project is to obtain, PAHO/WHO's assistance to the Government in various phases of a national ionizing radiation protection program, which comprises a survey of equipment-emitting radiations, the certification of its safe operation and of the capability of the operator, and a radiation monitoring service based on film dosimetry and personnel training.

TOTAL		-	3	3	TOTAL	WR	4,100	4,855	6,060
FELLOWSHIP MONTHS	WR	-	3	3	SEMINAR COSTS		2,000	-	-
					SUPPLIES AND EQUIPMENT		2,100	2,200	3,000
					FELLOWSHIPS		-	2,655	3,060

PERU-3000, INDUSTRIAL HYGIENE

This project supports the efforts of the Government to sustain and promote the physical, mental and social well-being of workers in their occupations, through the prevention and control of industrial accidents and occupational diseases.

TOTAL		3	3	3	TOTAL	WR	5,310	5,655	6,310
FELLOWSHIP MONTHS	WR	3	3	3	SEMINAR COSTS		-	-	2,250
					SUPPLIES AND EQUIPMENT		3,000	3,000	1,000
					FELLOWSHIPS		2,310	2,655	3,060

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-3200, FOOT-AND-MOUTH DISEASE CONTROL

Foot-and-mouth disease is one of the animal diseases that has a more direct impact on food production (meat, milk and derivatives). It causes serious economic losses and public health problems by reducing the reserves of essential proteins necessary for the normal development of the population. The Government, through the Ministries of Health and Food, and with the assistance of the IDB, is seeking to conduct effective preventive activities including the establishment of a special foot-and-mouth disease control program, which would include periodic and compulsory vaccination of more than 80% of the cattle in priority areas; compulsory reporting of all cases of foot-and-mouth disease; adoption of preventive measures, isolation, quarantine, and disinfection of infected farms. The production of foot-and-mouth disease vaccine continues to be the critical point of the program.

TOTAL		12	12	12	TOTAL	121,530	43,675	45,905
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P-4 CCOUNTRY CONSULTANT	PR	-	12	12				
.0631					SUBTOTAL	PR	-	43,675
P-4 VETERINARIAN	PG	12	-	-	-----	-----	-----	-----
.4924					PERSONNEL-POSTS	-	41,675	43,905
					DUTY TRAVEL	-	2,000	2,000
TOTAL		21	-	-	SUBTOTAL	PG	121,530	-
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CONSULTANT MONTHS	PG	21	-	-	PERSONNEL-POSTS	43,000	-	-
					PERSONNEL-CONSULTANTS	72,317	-	-
TOTAL		6	-	-	DUTY TRAVEL	2,000	-	-
-----		-----	-----	-----	FELLOWSHIPS	4,213	-	-
FELLOWSHIP MONTHS	PG	6	-	-				

PERU-3300, RABIES CONTROL

Rabies, a zoonotic disease, is widespread throughout the country, especially in urban and suburban areas where the density of the human and dog population is high. In the five-year period, 1969-1973, the average annual number of human cases was 10 and of animal cases, 639. Dogs are responsible for 91% of all cases notified. The average annual rate of persons bitten by dogs is 260 per 100,000 and, of these, approximately 36% are given rabies treatment.

The purposes of this project are to prevent human rabies by controlling canine rabies and rabies transmitted by vampire bats, and to improve community education. Its objectives are to improve laboratory diagnosis of rabies; to control outbreaks; to continue epidemiological surveillance; to encourage the clinical follow-up of dogs that have bitten human beings; to provide exposed persons with treatment; and to continue with community education.

As a result of the efforts made during the first stage of the program, animal and human rabies have been eradicated from the metropolitan area of Lima and Callao. At present the program is being extended at the national level to include the principal urban areas, where it is planned to vaccinate 80% of the dog population and to eliminate each year 20% of all stray dogs.

TOTAL		3	6	6	TOTAL	WR	9,310	13,060	11,620
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FELLOWSHIP MONTHS	WR	3	6	6	SEMINAR COSTS	3,000	2,250	2,500	
					SUPPLIES AND EQUIPMENT	4,000	5,500	3,000	
					FELLOWSHIPS	2,310	5,310	6,120	

PERU-3301, HYDATIDOSIS CONTROL

Hydatidosis in the country is a public health problem that primarily affects sheep farmers, especially those in the Sociedades Agrícolas de Interés Social of the Central Mountain Range. The economic losses due to reduction of output are estimated at S/.20 million a year. The prevalence is 30% in sheep and 10% in cattle and the number of human cases that has to be treated surgically is 530 per 100,000. The most important link in the epidemiological chain of human hydatidosis is dogs, in which the prevalence of tenia echinococcus ranges from 20 to 60%, according to the area.

The purpose of this project is to control canine echinococcosis and to reduce the risk of its transmission to man by organizing veterinary services for the control of offal in slaughterhouses, providing parasitic treatment of dogs, and educating the community not to feed dogs with infected offal, especially when animals are slaughtered at home.

TOTAL		3	6	3	TOTAL	WR	6,810	7,560	8,060
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FELLOWSHIP MONTHS	WR	3	6	3	SEMINAR COSTS	2,000	2,250	2,500	
					SUPPLIES AND EQUIPMENT	2,500	-	2,500	
					FELLOWSHIPS	2,310	5,310	3,060	

PERU-3302, BRUCELLOSIS CONTROL

Goat brucellosis is one of the zoonotic diseases of greatest impact on public and animal health in the country. The purposes of this project are to control human brucellosis by eradicating the disease in goats and strengthening goat farming, productivity, herd management and health. To that end a plan of work has been formulated, the principal objectives and goals of which are the regular vaccination of goats with Brucella melitensis vaccine Rev. 1; the improvement of laboratory diagnosis; the upgrading of cheese-making technology; the management of herd; and the maintenance of epidemiological surveillance services.

TOTAL		3	6	6	TOTAL	WR	4,310	7,560	6,120
-----		-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	WR	3	6	6	SEMINAR COSTS	2,000	2,230	-	
					FELLOWSHIPS	2,310	5,310	6,120	

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

PERU-4200, LABORATORY SERVICES

The objectives of this project are to organize health laboratories and blood therapy, and pathological anatomy services in the country; to prepare national standards for those fields; to train the necessary personnel, and to conduct applied research.

Among the principal activities conducted during the year, special mention must be made of the drafting of the general standards for the organization of the National Laboratory Network of the Country and the establishment of criteria for the conduct of the program through health regions. In addition, activities relating to the organization of blood banks were undertaken, a course for laboratory auxiliaries was held, and the nationwide programs for laboratory diagnosis of enteric and venereal diseases were revised, as were the programs for the bacteriological control of water.

TOTAL		3	3	3	TOTAL	WR	7,310	5,385	5,560
FELLOWSHIP MONTHS	WR	3	3	3	SUPPLIES AND EQUIPMENT		2,000	-	2,500
					FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		3,000	2,730	-

PERU-4201, NATIONAL HEALTH LABORATORIES

The purpose of this project is to help the National Institutes of Health to train qualified personnel and to provide technical advice through specialized consultants in different program areas. During 1975 and 1976 a total of 55 fellowships (510 man/months) and 15 consultants (73 man/months) were provided.

TOTAL		16	-	-	TOTAL	PG	103,512	-	-
CONSULTANT MONTHS	PG	16	-	-	PERSONNEL-CONSULTANTS		56,363	-	-
TOTAL		67	-	-	FELLOWSHIPS		47,149	-	-
FELLOWSHIP MONTHS	PG	67	-	-					

PERU-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The Ministry of Health is the supreme authority of the health sector and the producer of direct services for the community; 70% of the medical care of the population is provided by it, 10% by social security institutions; and the remaining 20% by other public and private agencies in the country. Generally speaking, the infrastructure and the human, physical and budgetary resources of the health sector are insufficient to provide complete coverage to the present population, which is growing rapidly because of the high birth rate.

The purpose of this project is to assist in multisectoral and health planning, at the central and regional level, in the reform of the health service system to ensure that it is better used, and in the training of human resources, the strengthening of regionalization, and the extension of the health infrastructure.

TOTAL		30	-	-	TOTAL	PR	46,120	-	-
P-5 MEDICAL OFFICER .0295	PR	6	-	-	PERSONNEL-POSTS		43,620	-	-
G-7 ADMINISTRATIVE ASSISTANT .0256	PR	12	-	-	DUTY TRAVEL		2,500	-	-
G-5 SECRETARY .4089	PR	12	-	-					

PERU-5100, DEVELOPMENT OF HEALTH SERVICES

Malnutrition, deficient basic sanitation, low educational and economic levels of the population, low population density, and emigration to urban centers are all factors affecting the level of health of the population.

The purpose of this project is to collaborate with the Government in raising the individual and collective health levels in order to facilitate and accelerate the country's economic and social development; broaden the coverage by its health services, especially in rural areas, integrating health sector activities with overall development programs; expand preventive health services, strengthening maternal and child care activities for the mining and industrial population and especially for the agricultural sector; reinforce the planning process, especially at the regional level; improve intrasectoral and intersectoral administration so as to provide for maximum utilization of sector resources; provide better social welfare services; and promote research in the health field through support of the programs of the School of Public Health, of the National Institute of Health, and of the universities.

TOTAL		12	36	36	TOTAL		63,935	87,050	108,195
P-4 MEDICAL OFFICER .4883	PR	12	12	12	SUBTOTAL	PR	27,815	51,815	69,575
G-7 ADMINISTRATIVE ASSISTANT .0256	PR	-	12	12	PERSONNEL-POSTS		26,315	49,165	66,775
G-5 SECRETARY .4089	PR	-	12	12	DUTY TRAVEL		1,500	2,650	2,800
TOTAL		6	6	6	SUBTOTAL	WR	36,120	35,235	38,620
FELLOWSHIP MONTHS	WR	6	6	6	SEMINAR COSTS		10,000	12,000	13,000
					SUPPLIES AND EQUIPMENT		6,500	5,925	6,500
					FELLOWSHIPS		4,620	5,310	6,120
					GRANTS		15,000	12,000	13,000

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-5101, DEVELOPMENT OF HEALTH SERVICES IN THE EASTERN REGION

The Eastern Health Region covers an area of 544,630.96 km² (46% of the area of the country), and had a population of 899,358 inhabitants in 1973. The population is highly dispersed and 90% of the communities have less than 500 inhabitants. The health level is unsatisfactory, the child mortality rate being 131.2 per 1,000 live births; the general mortality rate in 1972 was 13.8 per 1,000 inhabitants and the maternal mortality rate 3.7 per 1,000 live births. Children under 15 years of age account for 60.5% of all deaths.

This project seeks to develop the present services and extend them to the underserved population by mobilizing resources to meet the needs of the hamlets within their jurisdiction and by motivating the underprivileged population to organize itself and to develop and make adequate use of those resources.

TOTAL		12	12	12	TOTAL	100,000	104,801	71,700
P-4 MEDICAL OFFICER 4.4522	WR	-	8	12	SUBTOTAL	WR	-	48,135
P-4 PROJECT MANAGER 4.4522	UNDP	12	4	-				71,700
TOTAL		6	6	-	PERSONNEL-POSTS		30,135	48,700
FELLOWSHIP MONTHS	UNDP	6	6	-	DUTY TRAVEL		2,500	3,000
					SEMINAR COSTS		-	5,000
					SUPPLIES AND EQUIPMENT		15,500	15,000
					SUBTOTAL	UNDP	100,000	56,666
								-
					PERSONNEL-POSTS		50,160	18,440
					DUTY TRAVEL		3,000	1,000
					SUPPLIES AND EQUIPMENT		41,840	32,226
					FELLOWSHIPS		5,000	5,000

PERU-5102, EXTENSION OF HEALTH SERVICES, NORTHERN REGION

The health status of the Northern Region is considered unsatisfactory because of the high mortality rates, in particular those of infants and children under five years of age, in which the impact of communicable and preventable diseases is significant. This is primarily due to the hostile conditions of the environment, the dispersion of the population, and the static system of health services, determined by the demand for services and the low level of penetration of the community.

The principal objectives of this project are to strengthen activities and practical arrangements for making better use of the installed capacity; to extend health coverage of mothers and children; to control communicable diseases by means of immunizations, epidemiological surveillance and the organization of the laboratory network; and to provide medical care and personnel training.

TOTAL	WR	-	4,000	4,000
SEMINAR COSTS		-	4,000	4,000

PERU-5103, EXTENSION OF HEALTH SERVICES IN THE SOUTHERN HIGHLANDS

In accordance with the Tripartite Plan of Operations for the Development and Extension of the Health Services of the Southern Tableland Region, supplies and stipends for training have been provided by UNICEF and advisory services by PAHO/WHO in the course of 1976.

The purposes of the project are to improve the health conditions of the population and to strengthen the structure of the health sector of the region, which means, because of the rural nature of the region and the low level of its development, preferential attention to the underserved population, medical services provided by health posts, and the manning of communal health posts with health promoters. The plan of action established provides for the strengthening of the infrastructure, with the successive organization of health posts, health centers and regional headquarters that will make it possible to carry out priority programs in the fields of maternal and child health and nutrition; communicable disease control based on vaccinations; tuberculosis control and epidemiological surveillance; medical care and simplified medicine; organization of a laboratory network and training of personnel; and upgrading of existing health statistics services.

TOTAL		24	24	24	TOTAL	81,735	88,050	91,755
P-4 MEDICAL OFFICER 4.3517	WR	12	12	12	SUBTOTAL	PR	34,115	36,540
P-3 NURSE .3856	PR	12	12	12				38,495
TOTAL		6	6	3	PERSONNEL-POSTS		33,615	35,540
FELLOWSHIP MONTHS	WR	6	6	3	DUTY TRAVEL		500	1,000
					SUBTOTAL	WR	47,620	51,510
								53,260
					PERSONNEL-POSTS		42,000	45,200
					DUTY TRAVEL		1,000	1,000
					FELLOWSHIPS		4,620	5,310

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-5104, DEVELOPMENT OF HEALTH SERVICES IN THE SOUTHEAST REGION

The Southeast Health Region comprises the Departments of Cuzco, Madre de Dios and Apurimac, which cover an area of 183,878 km², together had a population of 1,131,832 inhabitants in 1973 and a population density of 6.1 inhabitants per km². Seventy-two per cent of the population is rural and 41.7%, under 15 years of age. The health level is unsatisfactory; the general mortality rate was 12.04 per 1,000 inhabitants in 1972; the infant mortality rate, 121.64, and the maternal mortality rate, 2.85, both per 1,000 live births.

The purpose of this project is to help raise the standards of health and living of the population, special attention being given to the vulnerable and economically active groups. Accordingly, it is intended to set up new health posts, health centers and hospitals; to provide the units with transportation and intercommunications; to develop human resources, especially auxiliary and technical manpower; and to conduct health programs.

TOTAL		6	12	12	TOTAL		30,080	155,000	155,000
P-4 MEDICAL OFFICER	UNDP	6	12	12	SUBTOTAL	WR	5,000	5,000	5,000
4.4915									
TOTAL		-	12	12	SEMINAR COSTS		5,000	5,000	5,000
CONSULTANT MONTHS	UNDP	-	12	12	SUBTOTAL	UNDP	25,080	150,000	150,000
TOTAL		-	5	5	PERSONNEL-POSTS		25,080	55,320	60,960
FELLOWSHIP MONTHS	UNDP	-	5	5	PERSONNEL-CONSULTANTS		-	48,000	54,000
					SEMINAR COSTS		-	20,460	10,000
					SUPPLIES AND EQUIPMENT		-	21,880	20,040
					FELLOWSHIPS		-	4,540	5,000

PERU-5200, MEDICAL CARE SERVICES

PAHO/WHO is assisting the Government in the Program of Services to Individuals, the objectives and goals of which are to improve the health situation, reduce morbidity and mortality, extend coverage to the underserved and scattered communities and to the shantytowns of the large cities, planning on the primary level.

This project is designed to ensure the interinstitutional and multisectoral coordination of the health sector; to collaborate in a study for reforming the health law with a view to instituting a socially oriented system in which better and more rational use is made of the resources available; to promote regionalization, including administrative decentralization and definition of functions and activities at the different levels and in health establishments; to raise the technical level of the administrative support subsystems of hospitals; to set up a national center for the maintenance of health institutions and to establish other subregional maintenance centers; and to strengthen the cancer control program and the mental health subprogram in its main aspects of adult and child psychiatric care, drug addiction, and mental retardation. Assistance will also be given to the education and training of multidisciplinary personnel and efforts will be made to ensure greater community participation.

TOTAL		24	24	24	TOTAL	PR	48,155	50,785	53,480
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	PERSONNEL-POSTS		45,655	48,285	50,980
.0911					DUTY TRAVEL		2,500	2,500	2,500
G-4 CLERK-STENOGRAPHER	PR	12	12	12					
.1061									

PERU-5400, HEALTH STATISTICS

The health statistics system is being radically revised in order to coordinate the vital statistics, and the resources and services subsystems with the reporting subsystem of the health service system of the Ministry of Health. To that end, an analysis and diagnosis of the production apparatus of those statistics is being made in order to focus it on the processing of the data required for the decision-making process and for the general information of the health sector of Peru.

Once this stage is completed, the service production report subsystem will be redesigned and coordinated with the reporting system of the service extension programs that have been designed for that purpose. Subsequently, as the planning method is adjusted, other projects or programs will be incorporated. The culmination of this process is expected to be a unified reports system.

TOTAL		3	3	3	TOTAL		6,310	7,155	7,560
FELLOWSHIP MONTHS	PR	-	-	3	SUBTOTAL	PR	-	-	7,560
FELLOWSHIP MONTHS	WR	3	3	-	SEMINAR COSTS		-	-	4,500
					FELLOWSHIPS		-	-	3,060
					SUBTOTAL	WR	6,310	7,155	-
					SEMINAR COSTS		4,000	4,500	-
					FELLOWSHIPS		2,310	2,655	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-5402, HEALTH INFORMATION SYSTEMS

The increasing need for information to plan, program, control and evaluate health services makes it vital to redesign health statistics procedures, especially those for the collection of data and their electronic processing, in order to make the optimum use of existing human, physical and technological resources.

The scale of planning activities in the sector has created a demand for data to provide the information needed at various decision-making levels. The purpose of this project is to cooperate in the development of the health information system in order to produce such data.

TOTAL		3	3	3	TOTAL	PR	16,310	16,655	7,060
		-----	-----	-----			-----	-----	-----
FELLOWSHIP MONTHS	PR	3	3	3	SUPPLIES AND EQUIPMENT		10,000	10,000	-
					FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		4,000	4,000	4,000

PERU-5500, MANAGEMENT OF HEALTH SERVICES

The purpose of this project is to strengthen the infrastructure and operating capacity of the health sector with a view to extending coverage, improving the quality of the services, and providing the community with them at a reasonable cost. To that end, managerial and operating structures, systems, and methods will be set up for the administrative, financial and manpower development aspects.

TOTAL		1	1	1	TOTAL	PR	12,320	13,310	13,520
		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		5,000	5,000	4,000
TOTAL		6	6	6	FELLOWSHIPS		4,620	5,310	6,120
		-----	-----	-----					
FELLOWSHIP MONTHS	PR	6	6	6					

PERU-6000, DEVELOPMENT OF HUMAN RESOURCES

The purposes of this project are to improve the collaboration between members of the health team and universities and to enlist the active participation of the health personnel of each region and to incorporate them into the teaching-learning process; to expand the education and training of health personnel at the intermediate and auxiliary level; to increase the volume of health services by using interns, students and residents in supervised practice; to undertake educational, operational and social epidemiological research; and to foster a better organization of the system as well as community health care and progressive patient care.

Multiprofessional seminars were held in which the health problems of the country, the feasibility of establishing groups of professionals in the same speciality, as well as the policies, strategies, organization and programs of activities for the education and training of personnel were discussed. Information and experience have been exchanged between the ministries, universities and professional associations. The final goal is the formation of a national multiprofessional group capable of adapting the health sciences curricula to the needs of the country on the basis of a common approach. The Government has assigned priority to the Eastern Health Region, in which a system of rotating internships has been established in the regional hospitals, departments and certain health centers. This program has been in operation in the Universidad Cayetano Heredia since the beginning of the year, and recently has been introduced into the Universidad Nacional Federico Villarreal and the Universidad Nacional Mayor de San Marcos. In 1975 and 1976 the Ministry of Health organized meetings on integration of services and education and has planned supervision of programs of integration of services and continuing education.

TOTAL	PR	6,000	6,500	6,500
		-----	-----	-----
SEMINAR COSTS		6,000	6,500	6,500

PERU-6100, SCHOOL OF PUBLIC HEALTH

The execution and implementation of health plans in the country is hindered by the shortage of personnel, their inadequate training, and their uneven distribution. The purpose of this project is to expand the academic program of the School of Public Health by means of regular and short courses in public health for health professionals in the different specialities, to conduct education and training courses for middle management and auxiliary personnel, and to undertake research activities on the supply and demand of health manpower, causes of child mortality, and functions to be performed by rural health posts which provide health care to the rural population.

TOTAL		12	12	5	TOTAL	PR	12,240	13,620	13,180
		-----	-----	-----			-----	-----	-----
FELLOWSHIP MONTHS	PR	12	12	9	SUPPLIES AND EQUIPMENT		3,000	3,000	4,000
					FELLOWSHIPS		9,240	10,620	9,180

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

PERU-6200, MEDICAL EDUCATION

In Peru there are six academic programs in medicine which annually train an average of 400 professionals. Medical manpower is insufficient to meet the medical care needs of the country, and this situation is worsened by the excessive concentration of medical manpower in the capital city.

The purposes of this project are to foster changes in the curricula with a view to adapting them to the real health needs of the country, with special emphasis on the teaching of preventive and social medicine; to support the training of instructors, especially in pedagogic skills; to assist in efforts to establish proper coordination of manpower training agencies and the agencies that employ their products; and to cooperate and participate in the organization of graduate education in the country.

TOTAL	PR	3,500	3,600	3,750
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SEMINAR COSTS		3,500	3,600	3,750

PERU-6201, CENTER FOR TRAINING IN PHYSIOLOGY AND PATHOLOGY OF HIGHLANDS

Forty per cent of the population of the country lives at an altitude of 3,000 meters above sea level. A center has been set up to coordinate studies and teaching of the health implications of permanent residence in an hypoxic environment. This project supports the teaching and research activities of the center; it is intended to provide training in various areas of highland physiology and pathology to personnel from the Andean Pact countries and to promote an exchange of instructors.

TOTAL	PR	8,500	9,100	9,200
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SUPPLIES AND EQUIPMENT		1,500	1,600	1,700
GRANTS		7,000	7,500	7,500

PERU-6300, NURSING EDUCATION

Investments in new health institutions in the next few years and the extension of coverage projected in the National Health Plan implies the need to increase the number of nurses that graduate from training programs. At present there are 3.7 nurses and 10.3 auxiliaries per 10,000 inhabitants.

According to the Educational Reform Law of the country, the purpose of the project is the balanced training of three levels of nursing personnel: auxiliary, intermediate and university. It also fosters the training of nursing instructors and the revision of curricula to adapt them to the needs of the health programs of the country. In the last three years of the decade, the aim of the project is to adapt the curricula of nursing schools to the educational reform of the country.

TOTAL	PR	3,000	4,000	5,000
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SEMINAR COSTS		3,000	4,000	5,000

PERU-6301, TRAINING OF HEALTH AUXILIARIES

The National Health Plan provides for the extension of coverage of health services to the deprived population groups and the stationing in rural areas of properly trained auxiliary personnel that will receive supervision in their specific tasks. In 1973 the National Auxiliary Personnel Training Plan was formulated with a view to raising the level of health of these communities. Between 1973 and 1976 a total of 34 three-month courses were held, in which 884 auxiliaries working in health posts were trained. In 1977 regular courses for the training of health auxiliaries will be undertaken.

This project fosters the development of primary care models based on auxiliary personnel and designed to increase health coverage through community participation.

TOTAL	PR	15,000	15,000	10,000
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SEMINAR COSTS		15,000	15,000	10,000

PERU-6400, SANITARY ENGINEERING EDUCATION

By means of this project, PAHO/WHO is assisting the National Engineering University in its efforts to foster greater communication between universities and environmental health specialists with a view to developing new approaches and techniques for accelerating an improvement in the health level of the population.

TOTAL		-	3	3	TOTAL	PR	3,500	6,355	4,560
-----		-----	-----	-----	-----		-----	-----	-----
FELLOWSHIP MONTHS	PR	-	3	3	SEMINAR COSTS		3,500	-	-
					SUPPLIES AND EQUIPMENT		-	3,700	1,500
					FELLOWSHIPS		-	2,655	3,060

FUND	1977	1978	1979
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FUND	1977	1978	1979
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	\$	\$	\$

PERU-6500, VETERINARY MEDICINE EDUCATION

The volume of qualified veterinary manpower must be increased to meet the needs of the country deriving from the food and nutrition policy, livestock development, and the protection of public health against animal diseases. Human resources properly trained in preventive medicine and veterinary public health are required for the control of rabies, brucellosis, hydatidosis, cysticercosis, distomatosis, equine encephalitis and other zoonoses, as well as outbreaks of food poisoning.

The purpose of this project is to strengthen the teaching of veterinary medicine in epidemiology, ecology, planning, programming campaign management and evaluation, with due regard to the food, nutrition, and public health policy of the country through technical cooperation provided by PAHO/WHO, CEPANZO and PANAFTOSA.

TOTAL	HR	3,500	3,600	3,750
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SEMINAR COSTS		3,500	3,600	3,750

PERU-6600, DENTAL EDUCATION

There are far too few dentists in the country to meet the oral health needs of the population and this situation is worsened by the excessive concentration of dentists in the capital and the lack of adequately trained auxiliary personnel. There are five academic programs in dentistry, three in Lima, one in Ica and another in Arequipa, which coordinate their activities through the Association of Academic Programs. In accordance with a decree law, these programs have been reorganized according to new methods on a departmental basis.

The purpose of this project is to strengthen the preventive and social aspects of dental education programs; to adapt the curricula to the real oral health needs of the country; to train dental instructors through courses and seminars; to foster the training of middle level and auxiliary personnel; and to test effective methods of integration of services and education.

TOTAL		20,214	3,600	3,750
-----		-----	-----	-----
SUBTOTAL	PR	3,500	3,600	3,750
-----		-----	-----	-----
SEMINAR COSTS		3,500	3,600	3,750
SUBTOTAL	PH	16,714	-	-
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SUPPLIES AND EQUIPMENT		16,714	-	-

PERU-7400, HOSPITAL MAINTENANCE AND ENGINEERING

Through this project PAHO/WHO will assist the Ministry of Health in the establishment of a national maintenance center and regional centers. These centers will train personnel and provide appropriate maintenance services, thus enabling the health institutions to render better services.

TOTAL		1	1	1	TOTAL	HR	7,700	8,000	8,400
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CONSULTANT MONTHS	HR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		5,000	5,000	5,000

SURINAM

Surinam has been an independent democratic republic since November 1975. It became a full member of WHO in March 1976 and of PAHO in September 1976.

Because of wide-scale emigration prior to independence, accurate population figures are not available, but are in the region of 350,000, with over 50% under the age of 25 years.

Dutch is the official language, although four or five other languages are in use. A local language, "Sranang Tongo," is an interracial lingua franca. Many people have some knowledge of English.

The Surinam culture largely evolved from European influences. This factor is significant in health care planning in that medical care, public health, hospital organization and management, nursing services and education are all more on European than on either South or North American lines, and have an important effect on staff recruitment.

The general health in Surinam is relatively good. Principal health problems are related to the environment. A full range of communicable diseases is represented, including malaria, schistosomiasis and yaws. The Aedes aegypti mosquito exists in great numbers in all population centers of any size. Gastroenteritic diseases and malnutrition exist, but not to the extent of less fortunate countries. Leprosy appears to be well controlled through a socially well-advanced program. Venereal diseases are a problem.

An excellent immunization program has been developed and has considerable community support.

The European cultural impact assumes its greatest significance in relation to the hospitals and the proposed national health insurance plan. This new and highly ambitious national insurance plan, although promised for December 1975, has only now reached the draft legislation phase. Total coverage of the population is proposed, with a full range of individual health care provisions. So far, there is no evidence of intention to integrate preventive with curative medicine on the part of the insurance planners, other than the inclusion of individual vaccination of infants.

Primary health care to the hinterland population is largely provided by a Government-subsidized medical missionary organization.

SURINAM
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	103,314	51.3	110,455	52.4	117,930	51.3
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	50,365	25.0	53,755	25.5	55,370	24.1
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COMMUNICABLE DISEASES						
0200 MALARIA	45,355	22.5	48,100	22.8	48,910	21.3
0800 PARASITIC DISEASES	5,010	2.5	5,655	2.7	6,460	2.8
ENVIRONMENTAL HEALTH SERVICES	11,319	5.6	11,310	5.4	12,920	5.6
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	5,010	2.5	5,655	2.7	6,460	2.8
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	6,309	3.1	5,655	2.7	6,460	2.8
COMPLEMENTARY SERVICES	41,630	20.7	45,390	21.5	49,060	21.6
-----	-----	-----	-----	-----	-----	-----
4100 NURSING	41,630	20.7	45,390	21.5	49,060	21.6
II. DEVELOPMENT OF THE INFRASTRUCTURE	97,960	48.7	100,390	47.6	111,690	48.7
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	92,950	46.2	94,735	44.9	105,230	45.9
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	69,450	34.5	73,345	34.8	77,350	33.8
5100 GENERAL PUBLIC HEALTH SYSTEMS	23,500	11.7	21,390	10.1	27,880	12.1
DEVELOPMENT OF HUMAN RESOURCES	5,010	2.5	5,655	2.7	6,460	2.8
-----	-----	-----	-----	-----	-----	-----
6200 MEDICINE	5,010	2.5	5,655	2.7	6,460	2.8
GRAND TOTAL	201,274	100.0	210,845	100.0	229,620	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

SURINAM
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			65	9,780	65	11,400	65	12,385
	Medical Officer	0.0610	P-4						
AMRO-1310 (WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			136	17,955	136	20,800	136	22,260
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			64	12,125	64	12,855	64	13,605
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			75	11,215	75	12,090	75	13,005
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			24	1,845	24	2,930	24	3,110
	Nurse	0.0887	P-4						
AMRO-4410 (PR)	<u>Health Education</u>			70	9,355	70	10,060	70	10,660
	Health Education Specialist	0.0918	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			40	5,110	40	5,475	40	5,825
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			39	6,340	39	6,790	39	7,230
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			22	2,425	22	2,610	22	2,785
	Nurse Educator	0.0604	P-3						
	<u>Total All Programs</u>			568	95,750	568	108,490	568	115,685
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

SURINAM - DETAIL

SURINAM-0200, MALARIA ERADICATION

The malaria eradication program began its activities in 1958 and since then the capital, Paramaribo, has been nonmalarious. The malaria situation has deteriorated in the interior, the problems being inadequate house coverage and a high rate of refusals. The resistance of *P. falciparum* to the four aminoquinolines has also complicated the situation. Manpower is wasted due to loss of time in Paramaribo between quarterly field expeditions.

The objective of the project is to eradicate malaria and maintain the country free of it. To achieve this, intensified vigilance schemes and improvement in the infrastructure of the antimalaria campaign are required.

TOTAL		12	12	12	TOTAL	WR	45,355	48,100	48,910
P-2 SANITARIAN 4,1048	WR	12	12	12	PERSONNEL-POSTS		29,800	31,900	34,200
					DUTY TRAVEL		2,300	2,310	2,425
					SUPPLIES AND EQUIPMENT		10,945	11,235	9,225
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	WR	3	3	3					

SURINAM-0800, SCHISTOSOMIASIS

The purpose of the project is to stop the transmission and reduce the prevalence of schistosomiasis in the country. The objectives are development of a conscious interest and active participation by the local population in the control program through health education activities; improvement of sanitary conditions by means of safe disposal of human waste and environmental sanitary measures to reduce the number of snail breeding places; vector control; collection of epidemiological data; and case finding and treatment.

TOTAL		1	1	1	TOTAL	WR	5,010	5,655	6,460
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3					
FELLOWSHIP MONTHS	WR	3	3	3					

SURINAM-2000, ENVIRONMENTAL SANITATION

The objectives of this project are to protect the environment against aerial, liquid or solid pollution and to control epidemic diseases with environmental engineering by the team approach.

During the budget period it is proposed to reinforce the development of the environmental sanitation unit of the Ministry of Health; to define the duties of sanitary inspectors; and to cooperate in the training program.

TOTAL		1	1	1	TOTAL	WR	5,010	5,655	6,460
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3					
FELLOWSHIP MONTHS	WR	3	3	3					

SURINAM-3100, VETERINARY PUBLIC HEALTH

The purposes of the project are to improve diagnostic capability for the zoonoses; to maintain the country free of foot-and-mouth disease through appropriate measures; to prevent outbreaks of rabies through bat and stray dog control measures; and to improve the inspection of food and meat through more clearly defined responsibilities.

During the budget period improvements in the capability of the veterinary laboratory will be continued through programs of training, in particular in immunology; rabies prevention will be investigated and appropriate legislation considered; and food and meat inspection will be reviewed and inspectors trained.

TOTAL		2	1	1	TOTAL		6,309	5,655	6,460
CONSULTANT MONTHS	PG	1	-	-					
CONSULTANT MONTHS	WR	1	1	1	SUBTOTAL	PG	1,299	-	-
TOTAL		3	3	3	PERSONNEL-CONSULTANTS		1,299	-	-
FELLOWSHIP MONTHS	WR	3	3	3	SUBTOTAL	WR	5,010	5,655	6,460
					PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		2,310	2,655	3,060

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

SURINAM-4100, NURSING SERVICES

The purposes of the project are to improve the entire nursing system of the country under the headings of education, services and public health nursing; to regularize the registration of nurses; to collaborate with the Ministry of Health in evaluating public health nursing, particularly in community nursing areas such as maternal and child health; and to collaborate with the implementation of the UNICEF-financed immunization program.

It is proposed to continue inservice education for nurses aides; improve teaching (theory and practical) of public health nursing for medical auxiliaries in the rural districts; and assist in developing an improved postbasic nursing education program.

TOTAL		12	12	12	TOTAL	NR	41,630	45,390	49,640
-----		-----	-----	-----	-----		-----	-----	-----
P-3 NURSE	NR	12	12	12	PERSONNEL-POSTS		29,800	31,900	34,200
4,4074					DUTY TRAVEL		1,050	1,100	1,160
					FELLOWSHIPS		10,780	12,390	14,280
TOTAL		14	14	14					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	NR	14	14	14					

SURINAM-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to cooperate with the Government in health planning and programming within the context of social and economic development and to assist the national health authorities in preparing and carrying out activities requiring international cooperation.

TOTAL		24	24	24	TOTAL	PR	69,450	73,345	77,350
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P-5 PAHO/WHO REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		57,590	60,890	64,270
.3306					DUTY TRAVEL		3,360	3,530	3,705
G- SECRETARY	PR	12	12	12	COMMON SERVICES		8,500	8,925	9,375
.3402									

SURINAM-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to improve the health services through integration of preventive medicine into the health system visualized in the National Health Insurance Plan; development of an accurate health information system; closer cooperation between relevant ministries, especially Health, Agriculture and Education; training of medical and paramedical personnel; the national immunization program; specific disease control programs--yellow fever, malaria, schistosomiasis, leprosy, social diseases and yaws; and improvement programs for management and planning.

TOTAL		3	3	4	TOTAL	PR	23,500	21,390	27,880
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	PR	3	3	4	PERSONNEL-CONSULTANTS		8,100	9,000	13,600
					FELLOWSHIPS		15,400	12,390	14,280
TOTAL		20	14	14					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	20	14	14					

SURINAM-6200, MEDICAL EDUCATION

The objectives of this project are to improve the level of undergraduate teaching, develop curriculum in keeping with the needs of the country, and increase curriculum emphasis on preventive medicine and public health.

In the budget period it is proposed to define health objectives, introduce modern concepts of community health, improve teaching methods, and assist faculty in better appreciation of alternative teaching methods (audiovisual, etc.).

TOTAL		1	1	1	TOTAL	PR	5,010	5,655	6,460
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3					
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FELLOWSHIP MONTHS	PR	3	3	3					

TRINIDAD AND TOBAGO

Trinidad and Tobago cover an area of 5,128 square kilometers and support a population of approximately 1.06 million (1973). Population density is high, 207 per square kilometer. Some 35% of the population live in St. George County, a large urbanized area in the northwest of Trinidad which includes the capital, Port of Spain. The rate of natural increase of the population declined from 3.12% in 1960 to 1.77% in 1973, after a temporary increase to 2.01% in 1972. Emigration further reduced the actual population growth from 3.1 to 0.1 and 1.3% for the corresponding years. Fertility rates decreased from 192.4 per 1,000 women 15-44 years of age in 1960 to 109.7 in 1973. There has been a vigorous national family planning program in the country since 1968. The birth rate, which was 39.5 in 1960, fell to 24.5 in 1970, and was 24.7 in 1973. In 1973, 39.6% of the population was under 15 years of age; 42.1% of women were between 15 and 44 years. The labor force was estimated at 389,000 in 1973, of which 17% was unemployed.

The Third Five-Year Plan (1969-1973) outlined a development strategy which would achieve full employment for the country in 15 years, a diversified and greatly strengthened economy, and a greater degree of economic independence. The role of trained manpower was identified as even more important than financing in such a long-term strategy. Education and training therefore became a central feature of the development strategy for the 1970's. Training in many aspects of management, in both private and public sectors, was regarded as an essential feature of this overall strategy. Per capita income was US\$983 in 1972.

Life expectancy was computed at 64.1 years for men and 68.1 for women (1970). The crude death rate fell from 7.9 per 1,000 population in 1960 to 6.6 in 1972, and was 7.1 in 1973. The infant mortality rate, which was 45.4 per 1,000 live births in 1960, fell to 32.4 in 1973. The maternal mortality rate, which was 1.9 per 1,000 live births in 1969, fell to 1.4 in 1973. In 1973, deaths in children under five years of age represented 14.02% of all deaths. In 1973 the first five principal causes of death (with ratio per 100,000 population) were diseases of the heart (165.8); cerebrovascular disease (96.0); malignant neoplasms (61.3); diabetes mellitus (43.6) and influenza and pneumonia (41.6).

In 1974, Government expenditure on health amounted to TT\$58,898,705 (US\$29 million) - approximately US\$27.00 per person. In 1975 Government expenditure on health amounted to TT\$90,205,572 - approximately TT\$78.00 per person. Approximately 12% of the total national budget is allocated for health services expenditure every year. It is estimated that a further TT\$10 million is spent on health by the private sector.

The National Health Plan (1967-1976) provided for the development of health services on a regional basis. Two regional hospitals with a total of 1,518 beds provide increasingly specialized services for the peoples of the country, who are subserved by a network of county and district hospitals and maternity units. Emphasis is being placed on upgrading hospital services at all levels, with special attention given to improvement of the level of health care at county and district hospitals. In some instances, specialist posts are being increased at the county hospital level, but the system also includes extension of coverage by visiting specialists from regional centers. Coverage and provision of minimal services for the few remote areas in Trinidad will be provided through the use of specially trained allied health professionals, with a system of easy reference to the county or regional level where indicated. District health services have been and will continue to be developed according to the Health Plan, on the basis of integrated medical care services. Although attention is being given to integration in all counties, three areas are now receiving special consideration. In addition, a county community health pilot project is being carried out to improve health care in the county and to provide guidelines for overall development with respect to county administration, integration of care, and improvement of hospital, clinic and field services. One hundred and one strategically placed health centers provide basic outpatient services in the nine program areas into which the county is subdivided. More ambulance service is needed to transport patients from the periphery to the more specialized central units. Telephone communication is available in most health services.

Maternal and child health services are being developed as an integrated program with family planning, and will include specific services for teenagers. Apart from providing prenatal and postnatal services for all mothers and attempting to reduce the 14% of deliveries by unqualified persons, the Government has set a target of reducing the birth rate to 19 per 1,000 by 1977. A reconstituted Population Council has recently been appointed, which will ensure greater representation of the public sector. An infant and childhood mortality study began in 1974 and is being continued in the County of Caroni.

Results from the 1970 household food consumption survey suggest that 31% of the population are not receiving sufficient protein and that 39% are receiving insufficient calories. Average daily per capita consumption was 2,948 calories and 82.5 grams of protein, including 36.4 grams of animal origin. A course for food service supervisors was carried out during 1974. A pilot project on the outpatient management of moderately severe and severe protein malnutrition started in January 1975. The National Nutrition Council is working towards the development of a national food and nutrition policy, and the Nutrition Committee of the Ministry of Health is planning to improve the community nutrition program and provide better nutrition and dietetic services in hospitals.

Family life education and health education are regarded by the Government as important projects for developing community participation and awareness in communities of their needs in terms of health services development.

Compulsory immunization for poliomyelitis and smallpox has been continued and is mandatory before admission to primary school. The Government has recently introduced similar regulations for vaccination against diphtheria and tetanus. Control of food handlers through annual compulsory medical examination and registration, with improved surveillance of typhoid cases and carriers, has been continued.

In the insect vector control program, malaria vigilance is maintained. The reinfestation with *Aedes aegypti* has caused considerable concern, and its control continues at a cost of nearly US\$500,000 a year, which is going to be increased.

The Government has recently introduced a very extensive program against venereal diseases. Venereal disease control and treatment are being strengthened through improved health education, contact tracing and early treatment. Tuberculosis control is maintained on ambulatory lines; BCG is offered to all primary school entrants and revaccination will be provided for those leaving school. Institutionalized treatment of leprosy is actively discouraged. A screening program for cancer of the cervix uteri has been continued. The mental health program carries out community-based ambulatory care with extension of facilities at the local level. Diabetes, hypertension and accident prevention have been given increasing priority.

With expansion of facilities at the National Public Health Laboratory, and establishment of the Epidemiological Unit and the CAREC, epidemiological surveillance has been greatly strengthened. Reporting of specific infectious diseases by telephone to the Epidemiological Unit by sentinel physicians has been instituted as a pilot for the Caribbean.

A Veterinary Public Health Unit was established in the Ministry of Health in 1973. One of the principal aims is the development of an effective food protection program. The Unit, in collaboration with the Animal Health Division of the Ministry of Agriculture, is embarking on control programs of several zoonotic diseases, utilizing the recently trained animal health and veterinary public health assistants. The development of a veterinary diagnostic laboratory has provided the tool for surveys of zoonoses in animals to ascertain the incidence of these diseases, which are considered a health hazard in many parts of the Americas.

There is a considerable deficit between demand and actual supply of water. In spite of this fact, in 1973, 83% of the urban population was served by house connection and 99% had either house connection or easy access to a piped water supply. In rural areas, only 38% was served by house connection and 95% had house connection or easy access. In 1973, 51% of the urban population and 0.3% of the rural population were served by sanitary systems. Sanitary disposal of solid waste in municipalities is poorly developed, and is nonexistent or grossly deficient in many rural and periurban areas. The National Water and Sewerage Authority, through its annual targets, hopes to provide 100% of the urban population with water connections and to achieve a 50% improvement in rural areas within this decade. Plans for improvement of sewage and solid waste disposal are

being developed in major towns. The Public Health Engineering Division began to operate in 1972 and its functions are to advise on and engage in the various disciplines of public health engineering, thereby contributing to the upgrading of rural health, establishment of standards, and control practices. Because of the serious lack of staff, the major activities are the privy construction and supply programs in rural areas. Other activities, to a great extent, depend on requests from various government organizations and other bodies. The Public Health Engineering Division has now been designated the operating area of the newly formed Pollution Control Council.

Development of medical records systems, initially at regional hospitals and later in the district hospitals and health centers, with processing of information at the Ministry of Health, is under way. The strengthening of the Statistical Unit of the Ministry and the provision of trained personnel at the peripheral level has been undertaken with a view to allowing realistic planning and programming of health care delivery services and disease surveillance.

A national hospital equipment maintenance program is being developed as a priority, needing much input in both human and material resources. A new regional program is being developed for maintenance services. Inadequate administrative management techniques, particularly at the middle level, have contributed to the problems at the ministerial and institutional levels for many years, and the Government is actively attempting to redress the situation. A project geared towards senior administrators and top management personnel has been continued in order to strengthen the administrative management practices in hospitals and district health services. Also, an administrative and financial study in health services is under way, with a loan from IDB.

Ratios of staff to population in 1976, although not the lowest in the Caribbean area, demonstrate an inequitable distribution, with serious shortages of health manpower in some rural areas. The number of personnel (and ratio per 10,000 population) is 544 physicians (5.05); 50 dentists (0.5); 1,737 nurses/midwives (Government sector only) (15.9); 720 auxiliary nurses/midwives (Government sector only) (7.0); 8 public health engineers (0.07); 130 public health inspectors (1.2); 289 pharmacists (mostly in the private sector) (2.7); 6 health educators (0.06); 22 veterinarians (0.2); 15 nutritionists (0.1); 14 social workers (0.1); 2 professional statisticians (0.02); 10 statisticians (0.1); 3 medical record officers (Government sector only) (0.03); 18 intermediate-level statisticians (0.2); 12 statistical/medical record clerks (0.1); 23 X-ray technicians (0.24); 24 opticians (0.2); and 31 optometrists (0.3). The shortage is acute in most areas but is particularly marked in the fields of dentistry and public health. Improved distribution of present staff, with strengthening of supporting and auxiliary services, is being undertaken. Training courses already exist in regional and some country centers for nurse and assistant nurse training and for public health nurse training. National programs for dental nurse training (35 students a year) and animal health assistant and veterinary public health assistant training (28 students a year) have been developed, and the Government looks forward to the establishment of a regional training program for allied health professionals. Through a loan from the World Bank the Government is improving its training facilities for public health nurses and nurse/midwives, especially in family planning procedures and education. There is a plan to train nurse practitioners with a loan from IDB. Moreover, the Government is considering the further extension of medical education in the country. Postgraduate medical training is being developed at Port of Spain Hospital in conjunction with medical staff from the University of the West Indies, and plans are being considered for the training of home economists/nutritionists at the University of the West Indies in St. Augustine. The training unit of the Water and Sewerage Authority is being strengthened.

TRINIDAD AND TOBAGO
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	190,715	29.6	156,980	30.5	138,145	38.0
ENVIRONMENTAL HEALTH SERVICES	179,545	27.9	151,325	29.4	131,685	36.2
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	62,765	9.8	61,720	12.0	63,245	17.4
2100 WATER SUPPLY AND EXCRETA DISPOSAL	62,060	9.6	23,860	4.6	-	-
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROGRAM PLANNING AND GENERAL ACTIVITIES	54,720	8.5	65,745	12.8	68,440	18.8
COMPLEMENTARY SERVICES	11,170	1.7	5,655	1.1	6,460	1.8
4300 EPIDEMIOLOGICAL SURVEILLANCE	11,170	1.7	5,655	1.1	6,460	1.8
II. DEVELOPMENT OF THE INFRASTRUCTURE	452,897	70.4	357,370	69.5	225,095	62.0
HEALTH SYSTEMS	160,260	24.9	190,400	37.1	225,095	62.0
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	97,060	15.1	108,065	21.0	127,360	35.1
5100 GENERAL PUBLIC HEALTH SYSTEMS	23,100	3.6	26,550	5.2	37,400	10.3
5400 STATISTICS AND INFORMATION SYSTEMS	13,480	2.1	15,390	3.0	17,680	4.9
DEVELOPMENT OF HUMAN RESOURCES	244,360	38.0	166,970	32.4	-	-
6500 VETERINARY MEDICINE	106,220	16.5	58,240	11.3	-	-
6600 DENTISTRY	138,140	21.5	108,730	21.1	-	-
PHYSICAL RESOURCES	48,277	7.5	-	-	-	-
7400 MAINTENANCE OF HEALTH CARE FACILITIES	48,277	7.5	-	-	-	-
GRAND TOTAL	643,612	100.0	514,350	100.0	363,240	100.0

*LESS THAN .05 PERCENT

TRINIDAD AND TOBAGO
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS				
1977											
PAHO---PR	102,865	24	-	2	67,285	34	26,180	5,500	-	-	-
PG	48,277	4	-	4	33,709	19	13,068	-	-	-	-
WHO---WR	186,050	36	24	2	119,410	47	36,190	-	7,000	-	17,550
UNDP	306,420	60	-	2	250,000	36	27,830	-	28,590	-	-
TOTAL	643,612	124	24	10	470,404	136	103,268	5,500	35,590	-	17,550
PCT. OF TOTAL	100.0				73.1		16.0	.9	5.5	-	2.7
1978											
PAHO---PR	117,505	24	-	2	83,215	34	30,090	-	-	-	-
WHO---WR	206,015	36	24	1	129,840	50	44,250	-	7,000	-	18,425
UNDP	190,830	40	-	2	187,200	2	1,210	-	2,420	-	-
TOTAL	514,350	100	24	5	400,255	86	75,550	-	9,420	-	18,425
PCT. OF TOTAL	100.0				77.8		14.7	-	1.8	-	3.6
1979											
PAHO---PR	123,580	24	-	1	84,800	34	34,680	-	-	-	-
WHO---WR	239,660	36	24	4	161,310	50	51,000	-	300	-	19,350
TOTAL	363,240	60	24	5	246,110	84	85,680	-	300	-	19,350
PCT. OF TOTAL	100.0				67.8		23.6	-	.1	-	5.3
PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION											
PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS											

TRINIDAD AND TOBAGO
ADDITIONAL ADVISORY SERVICES AVAILABLE
FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			65	9,780	65	11,400	65	12,385
	Medical Officer	0.0610	P-4						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			136	17,955	136	20,800	136	22,260
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-1410 (WR)	<u>Nutrition</u>			60	4,925	60	7,750	60	8,415
	Medical Officer	4.0885	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			42	8,040	42	8,525	42	9,020
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			37	5,575	37	6,015	37	6,475
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			48	3,750	48	5,945	48	6,310
	Nurse	0.0887	P-4						
AMRO-4410 (PR)	<u>Health Education</u>			70	9,355	70	10,060	70	10,660
	Health Education Specialist	0.0918	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			52	7,560	52	8,180	52	8,815
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			41	5,200	41	5,570	41	5,930
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			40	5,110	40	5,475	40	5,825
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			39	6,340	39	6,790	39	7,230
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			44	4,810	44	5,170	44	5,515
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			114	32,685	108	25,000	108	25,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	<u>Total All Programs</u>			821	140,685	815	150,160	815	158,660

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

TRINIDAD AND TOBAGO - DETAIL

TRINIDAD AND TOBAGO-2000, ENVIRONMENTAL SANITATION

The basic environmental sanitation problem is the increasing need for personnel with engineering and technical competency and for updated laws, regulations and standards pertaining to water quality, solid waste, air pollution, food and occupational hazards.

TOTAL		12	12	12	TOTAL	PR	62,765	61,720	62,245
P-4 SANITARY ENGINEER .3384	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
					PERSONNEL-CONSULTANTS		2,700	3,000	-
					DUTY TRAVEL		2,000	2,000	2,000
TOTAL		1	1	-	SEMINAR COSTS		5,500	-	-
					FELLOWSHIPS		13,090	15,045	17,340
CONSULTANT MONTHS	PR	1	1	-					
TOTAL		17	17	17					
FELLOWSHIP MONTHS	PR	17	17	17					

TRINIDAD AND TOBAGO-2100, STRENGTHENING OF TRAINING UNIT OF WATER AND SEWERAGE AUTHORITY

The Water and Sewerage Authority of Trinidad and Tobago (WASA), under pressure to meet rapidly increasing demands for water for both domestic and industrial use and to collect and safely dispose of wastewater, has undertaken to develop a more intensive and practical training program for its 3,000 plus employees. Assistance in this task is being provided by means of a three-year joint FAO/WHO-UNDP project, which was initiated 1 April 1975.

The principal effort to date has been to construct and equip demonstration, workshop, and library facilities so that supervisory and operating personnel may improve their technical skills and efficiency and become more aware of preventive and routine maintenance needs and techniques and water quality and pollution as originally anticipated; progress has been steady, and plans are being formulated by WASA for further expansion of training efforts. Prospects are good for WASA to assume an active regional role in the Eastern Caribbean for up-to-date training of water and sewerage personnel, but continuing assistance will undoubtedly be needed to maintain the present momentum.

TOTAL		12	3	-	TOTAL	UNDP	62,060	23,860	-
P-5 PROJECT MANAGER 4.4335	UNDP	12	3	-	PERSONNEL-POSTS		48,600	14,440	-
					PERSONNEL-CONSULTANTS		7,000	7,000	-
TOTAL		2	2	-	SUPPLIES AND EQUIPMENT		1,620	2,420	-
					FELLOWSHIPS		4,860	-	-
CONSULTANT MONTHS	UNDP	2	2	-					
TOTAL		6	-	-					
FELLOWSHIP MONTHS	UNDP	6	-	-					

TRINIDAD AND TOBAGO-3100, VETERINARY PUBLIC HEALTH

The basic problem confronting the newly established Veterinary Public Health (VPH) Unit of the Ministry of Health is to develop the necessary infrastructure in order to become a viable and valuable member of the public health team. Four veterinary public health assistants have been trained and will be assigned to the Unit in 1976. Additional trainees will be assigned in 1977.

The primary emphasis of the VPH Unit in the immediate future is in the area of food protection programs. Efforts are being made to improve sanitary conditions at abattoirs and to bring meat and poultry inspection standards in line with modern concepts. Additionally, surveillance programs in zoonotic diseases are being developed and will expand with the addition of veterinary public health assistants. A project to establish a laboratory animal facility has also been undertaken by the Unit.

The purpose of this project is to assist the VPH Unit in developing effective programs in the areas mentioned above. The objective is to firmly establish this Unit as a basic component in the multidisciplinary approach for identifying and solving public health problems. Support is also given to other assigned countries in the field of veterinary public health.

TOTAL		12	12	12	TOTAL	WR	54,720	65,745	68,440
P-4 VETERINARIAN 4.3858	WR	12	12	12	PERSONNEL-POSTS		38,000	41,200	44,700
					PERSONNEL-CONSULTANTS		2,700	-	3,400
TOTAL		1	-	1	DUTY TRAVEL		2,400	2,500	2,700
					SUPPLIES AND EQUIPMENT		7,000	7,000	300
CONSULTANT MONTHS	WR	1	-	1	FELLOWSHIPS		4,620	15,045	17,340
TOTAL		6	17	17					
FELLOWSHIP MONTHS	WR	6	17	17					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

TRINIDAD AND TOBAGO-4300, EPIDEMIOLOGY

The purpose of this project is to assist in further improvement of epidemiological surveillance and disease control through consultants and fellowship studies in such fields as immunization, laboratory practices, venereal disease control, insect vector control, accident prevention, and cancer registry.

The training of nurses and public health inspectors in epidemiology has been started and the reporting of specific infectious diseases by telephone to the epidemiological unit by sentinel physicians is continuing. Compulsory immunization for poliomyelitis, smallpox, tetanus and diphtheria is mandatory for admission to primary school. Control of food handlers through annual compulsory medical examination and registration, with improved surveillance of typhoid cases and carriers, has been continued. In the Insect Vector Control Program malaria vigilance is maintained. Reinfestation with *Aedes aegypti* has caused considerable concern and a five-year eradication campaign has been commenced.

The Government has introduced a very extensive program against venereal diseases, and control and treatment are being strengthened through improved health education, contact tracing and early treatment. Tuberculosis control is maintained on ambulatory lines. BCG is offered to all primary school entrants, and revaccination will be provided for those leaving school. Institutionalized treatment of leprosy is actively discouraged. A screening program for cancer of the cervix uteri continues. Diabetes, hypertension and accident prevention are being given increasing priority.

TOTAL		1	1	1	TOTAL	WR	11,170	5,655	6,460
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		8,470	2,655	3,060
TOTAL		11	3	3					
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FELLOWSHIP MONTHS	WR	11	3	3					

TRINIDAD AND TOBAGO-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

Emphasis continues to be placed on preventive medicine. Major areas of concern in the health sector relate to environmental sanitation, pollution control, the extension of the coverage of medical care services, and the development of teaching institutions for health personnel.

TOTAL		48	48	48	TOTAL	WR	97,060	108,065	127,360
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P-5 PAHO/WHO REPRESENTATIVE	WR	12	12	12	PERSONNEL-POSTS		76,010	85,640	103,010
4.3225					DUTY TRAVEL		3,500	4,000	5,000
P-1 ADMINISTRATIVE OFFICER	WR	12	12	12	COMMON SERVICES		17,550	18,425	19,350
4.4726									
G-6 SECRETARY	WR	12	12	12					
4.0267									
G-5 ADMINISTRATIVE ASSISTANT	WR	12	12	12					
4.0828									

TRINIDAD AND TOBAGO-5100, DEVELOPMENT OF HEALTH SERVICES

The basic problems of the health services are the shortage of trained staff, the deficiencies of the planning and management of health care programs, the improper maintenance of health service facilities and equipment, and the unsatisfactory evaluation of the health services.

The purposes of this project are to assist the Government in improving the planning, management and evaluation of the health services; and to provide advice in the most efficient utilization of the existing staff and in the training and use of new categories of health personnel.

TOTAL		-	-	2	TOTAL	WR	23,100	26,550	37,400
-----		-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	-	-	2	PERSONNEL-CONSULTANTS		-	-	6,800
					FELLOWSHIPS		23,100	26,550	30,600
TOTAL		30	30	30					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	WR	30	30	30					

TRINIDAD AND TOBAGO-5400, HEALTH STATISTICS

The purpose of the project is to provide relevant, reliable and timely information for management, planning and evaluation of health services. Progress has been slow due to a lack of trained technical and management personnel and the absence of a career structure covering health statistics and medical records.

Priority has been given to statistics on inpatient morbidity, immunization and communicable diseases. Interest is presently focused on community health record systems. All of the information systems, including registration of vital events, are experiencing considerable difficulties.

Potential for change has been stimulated in the areas of medical records management and hospital statistics coverage by the passing by the Cabinet of an amendment to the private hospital ordinance and by further processing of a statute of limitation on the retention of medical records. Increasing the number of trained personnel has been made possible by the College of Arts, Science and Technology in Jamaica and the teaching facilities of the CAREC. Improvement of community health record systems has been enhanced by the extension for three months of a short term consultant working in that area. Consideration continues to be given to the development of a statistical and medical records staffing infrastructure.

TOTAL		1	1	1	TOTAL	PR	13,480	15,390	17,680
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		10,780	12,390	14,280
TOTAL		14	14	14					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	14	14	14					

FUND	1977	1978	1979
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FUND	1977	1978	1979
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	\$	\$	\$

TRINIDAD AND TOBAGO-5500, MANAGEMENT OF HEALTH SERVICES

This project is directed towards the strengthening of the planning, programming and management functions of the Ministry of Health. Special attention is being given to the investigation of alternative methods of financing health care services, in particular to a national health insurance system. Efforts are also being made to improve the administration of decentralized district medical services.

TOTAL		12	12	12	TOTAL	PR	26,620	40,395	42,655
-----		-----	-----	-----					
P-3 ADMIN. METHODS OFFICER .2055	PR	12	12	12	PERSONNEL-POSTS		22,410	35,540	37,495
					DUTY TRAVEL		1,900	2,200	2,100
					FELLOWSHIPS		2,310	2,655	3,060
TOTAL		3	3	3					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	PR	3	3	3					

TRINIDAD AND TOBAGO-6500, DEVELOPMENT OF CURRICULUM FOR ANIMAL HEALTH ASSISTANTS

In order to diversify the economy of the country, the Government has given priority to the modernization of the agricultural sector, including the expansion of the livestock industry, and is attempting to reduce the food import bill, especially in meat and meat and dairy products. The expanding livestock industry is hampered by the complete lack of trained animal health assistants to assist the veterinarians in the implementation of disease control programs. Many of the necessary training facilities already exist at the Eastern Caribbean Institute of Agriculture and Forestry and the incorporation of animal health assistants training will increase the utilization of this facility. The broader based veterinary service created by the corps of animal health assistants will enable the problems of bovine rabies, tuberculosis and tick-borne diseases, hog cholera, poultry diseases, etc., to be more easily solved, and in so doing increase the country's self-sufficiency in animal protein.

The purpose of the project is to develop a cadre of animal health and veterinary public health assistants for staffing the infrastructure within the respective Ministries of Agriculture and Health and thus to better utilize the services of the veterinary professionals and to implement effective disease control or eradication programs.

TOTAL		24	13	-	TOTAL	UNDP	106,220	58,240	-
-----		-----	-----	-----					
P-5 PROJECT MANAGER 4.4423	UNDP	12	1	-	PERSONNEL-POSTS		97,200	58,240	-
P-4 VETERINARIAN 4.4467	UNDP	12	12	-	SUPPLIES AND EQUIPMENT		2,970	-	-
					FELLOWSHIPS		6,050	-	-
TOTAL		8	-	-					
-----		-----	-----	-----					
FELLOWSHIP MONTHS	UNDP	8	-	-					

TRINIDAD AND TOBAGO-6600, TRAINING SCHOOL FOR DENTAL NURSES

The existing government dental service is inadequate to meet the dental needs of the present population. The long-range objective of this project is to establish effective government dental services in this area of the English-speaking Caribbean by employing two classes of dental operators--dental surgeons and dental nurses. The inclusion of the dental nurse orients the service towards the child population. It is hoped that the need for emergency dentistry will gradually be reduced through the development of effective preventive and curative programs and thus the government dental services can shift from emergency care to restorative and preventive care.

The immediate objectives are the establishment of a school of dental nursing with an annual intake of 35 students--25 from Trinidad and Tobago and 10 from surrounding islands; the construction or conversion of permanent quarters for the school; the equipping of the school; the development of curricula; the amendment of current laws; the establishment of a program and positions for trained auxiliary personnel; and the planning of an areawide field program for the input of graduates.

TOTAL		24	24	-	TOTAL	UNDP	138,140	108,730	-
-----		-----	-----	-----					
P-5 PROJECT MANAGER 4.4418	UNDP	12	12	-	PERSONNEL-POSTS		97,200	107,520	-
P-4 DENTAL OFFICER 4.4415	UNDP	12	12	-	SUPPLIES AND EQUIPMENT		24,000	-	-
					FELLOWSHIPS		16,940	1,210	-
TOTAL		22	2	-					
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FELLOWSHIP MONTHS	UNDP	22	2	-					

TRINIDAD AND TOBAGO-7400, HEALTH AND MAINTENANCE SERVICES

The basic problem is the poor state of maintenance of plant and equipment in health care facilities throughout the islands resulting from a lack of systematic management of maintenance personnel and the inadequate technical capability of such personnel, particularly with respect to the newer, more complex equipment.

The objectives of the project are to improve the state of and acceptable standards for such maintenance by introducing the use of more advanced management techniques and by upgrading the capability of technicians through training at all levels.

	FUND	1977	1978	1979
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TOTAL		4	-	-
P-5 MAINTENANCE ENGINEER 4764	PG	4	-	-
TOTAL		4	-	-
CONSULTANT MONTHS	PG	4	-	-
TOTAL		15	-	-
FELLOWSHIP MONTHS	PG	15	-	-

	FUND	1977	1978	1979
	----	----	----	----
		\$	\$	\$
TOTAL	PG	48,277	-	-
PERSONNEL-POSTS		20,791	-	-
PERSONNEL-CONSULTANTS		12,918	-	-
DUTY TRAVEL		1,500	-	-
FELLOWSHIPS		13,068	-	-

UNITED STATES OF AMERICA

During the past three decades, Federal Government health care programs have consumed an increasing share of the budget. These increases in health spending, together with the increased availability of health resources, have coincided with improved health status of the people. There are still many problems, however. For some groups, health care is not available for geographic or economic reasons.

In the recent past, a great deal of attention has been given to a leveling off of mortality trends in the United States of America. To illustrate, between 1968 and 1974 the rate of decline in age-adjusted death rates per 1,000 population averaged 2% a year - as rapid a decline as was observed from 1935 to 1955. The adjusted rate in 1974 was 6.6 deaths per 1,000 population as compared to 7.3 per 1,000 population in 1969.

Infant mortality rates have shown a pattern of decline similar to the mortality rates of the total population. During the most recent decade, infant mortality has been declining at a rate of about 4% per year.

Since there are no adequate data regarding past prevalence, little is known about trends in morbidity and debility rates. To the extent that the decline in mortality is due to increased survival among those afflicted with life-threatening diseases, rather than to decreased incidence of those diseases, one would expect an increase in the proportion of chronically diseased and disabled individuals in the population, i.e., those whose deaths are postponed would remain in the population in a more or less disabled condition. The extent to which this phenomenon has been occurring cannot be determined from existing data, but such knowledge clearly is essential to sound manpower and facility planning.

The major conditions causing debility are arthritis and rheumatism, impairments of the lower extremities and hips, heart conditions, and cerebrovascular diseases. In addition to chronic conditions, an estimated 9.6 million persons had visual impairments, 14.5 million persons had hearing impairments and 8 million persons had impairments of the back and spine, according to 1971 figures.

The recent Health and Nutrition Examination Survey shows evidence of significant iron and vitamin A deficiencies, particularly among the poor. The extremes of caloric intake - under- and overnutrition - were also found to be more common among the poor than the more affluent.

Dental diseases affect almost the entire population, and their toll in pain and tooth loss is great. Encouragingly, however, tooth loss among adults 45-64 years of age declined significantly: from 29.1 persons per 100 population in 1958 to 23.3 per 100 in 1971.

Although mortality is a significant indicator of health status, mental disorders and substance abuse are also major factors related to disability and limitation of activity. It is estimated that 9 million persons are directly affected by alcohol abuse; 750,000 are active opiate users; 12.4 million are active marijuana users; 6.8 million are active stimulant users; and 5.3 million are active sedative users. In addition, an estimated 20 million persons suffer from some form of mental disorder. Four million of these persons receive care in psychiatric facilities.

During the nearly three decades since the Hill-Burton facilities construction legislation was enacted, more than US\$12 billion has been spent for construction and modernization, with some 30% of this coming directly from the Federal Government. As a consequence of this program and other forces, there are approximately 4.3 nonfederal general medical and surgical hospital beds per 1,000 civilian resident population, and the distribution of hospital beds over the country has become more nearly balanced. The number of beds in nursing homes doubled between 1946 and 1974; the ratio of beds to population 65 years of age and over increased more than 70%. An estimated 3,000 facilities in the United States of America provide care for persons with alcohol-related problems. These include hospitals, intermediate care, and inpatient and outpatient facilities.

In recent years, the number of active physicians in the United States of America has been growing faster than the population as a whole, and thus the physician/population ratio has been increasing. Assuming no marked shift in the size of medical school graduating classes, the addition of foreign medical graduates to the United States of America stock, and the fertility rates of the population, the physician/population ratio in 1990 might be as much as 50% greater than it is today. The geographic distribution of physicians is weighted heavily toward metropolitan areas. In 1973, there were approximately 196 nonfederal physicians providing patient care for every 100,000 individuals living in the largest metropolitan areas. The comparable ratio for small nonmetropolitan counties was 40 physicians for every 100,000 residents.

More than one-half of all health professionals are registered nurses, the largest single group of health workers. The number of registered nurses is expected to double between 1970 and 1990. While there are projected increases in the number and rate per 100,000 population of dentists, pharmacists and optometrists, these increases are not as large as for physicians and nurses.

Aggregate expenditures in the health sector have been rising approximately 10% or more per year for each of the past eight years. Federal expenditures for personal health care have been growing more rapidly than private expenditures. The share of aggregate personal health care expenditures paid for by the Federal Government has risen from 8.5% in fiscal 1965 to 25.5% in fiscal 1974. Much of this rise has been due to expenditures under the Medicare and Medicaid programs which provide coverage for retired persons. Approximately 70% of Medicare expenditures in fiscal 1974 went for hospital care and 20% for physicians' services.

The percentage of the aggregate expenditures paid for out-of-pocket by families has been steadily decreasing for at least the past four decades. This is due both to the increase in the federal share and the increase in coverage by private insurance. However, because of the unevenness of health insurance coverage, the absence of coverage for certain categories of care, and the relatively shallow coverage for others, there is still an appreciable risk for many families of incurring responsibility for substantial payments for medical care.

There is almost no area of health where the available knowledge is adequate to the challenges faced. The goal is clear: to improve the health status of people; the means to achieve that goal are frequently not so clear. Knowledge development is important not only in the biomedical fields but also for health services delivery, financing, and improving the quality of care.

Research support has a very long tradition as an accepted federal role in health. The Federal Government supports 65% of the health-related research in the nation. The magnitude of the federal role in health research, the consequent impact of federal policy, and the levels and consistency of funding for such research, explain the origin of the widely expressed concern and controversy about biomedical research.

Continued emphasis will be placed on research in cancer, heart and lung, mental health and health services. In addition there are a number of special concerns which have a common thread - the need for a coordinated health perspective on related activities and on identified gaps in mental health, particularly in research. Child health is another major priority, including fertility regulation, monitoring fetal well-being, normal pregnancy, hazards during labor, nutrition, accident prevention and child mental health. Other areas for expanded research are renal dialysis/transplantation, aging/long-term care, methods for improved health education, and further assessment of prevention activities.

In recent years, it has become clear that only by preventing disease from occurring, rather than treating it later, can any major improvement in health be achieved. Aside from the possibility of some major research breakthrough, only marginal improvement in longevity, for example, can be expected from further expansion of the medical care system. Certainly the present system's inequities must be overcome and health services made equally available to all without regard to ability to pay. But even this cannot be expected to result in significant changes in overall health status. Something more fundamental is needed.

The problem of disease prevention itself has changed radically since 1900 when pneumonia, influenza and tuberculosis were the leading killers. Today, heart disease, cancer and stroke and, among the younger age groups, deaths from motor vehicle accidents, homicide and suicide, claim attention. A distinctive feature of these conditions is that most of them are caused by factors (e.g., the environment and individual behavior) that are not susceptible to direct medical solution.

It is, therefore, a basic premise of the prevention strategy that much greater attention and more resources be directed at preventing the underlying causes of disease rather than at the disease itself - e.g., at controlling cigarette smoking, alcohol abuse, and exposures to toxic chemicals in the environment. Enough is known about the underlying causes to justify major preventive action now. The diseases are no longer inexplicable events beyond man's control. An overwhelming proportion of them are caused by man and his institutions and can be controlled by him.

A relatively small number of underlying factors are judged to be primarily responsible for much of the disease and death in the United States of America today. Each year, research is forging more of the causal links between these factors and specific diseases. It has been estimated, for example, that between 75 and 80% of cancer is caused by factors in the environment, such as diet, smoking and pollution.

Improving the delivery of health care services cuts across areas of health planning and resource development. There are basic strengths of the American health care system which result from a commitment to individual and local initiative and diversity and the ability of science and technology to help solve societal problems. However, the commitment to individual initiative has gone hand-in-hand with a lack of an orderly, planned distribution of health resources. The tendency to focus on technological solutions has fostered a pattern of increasing specialization. Both factors have contributed to rising health care costs. The challenge is clear: to develop needed improvements in the health system while preserving the essential strengths of the system.

There are a series of specific strategies to help improve delivery of health care services; expansion of cost-containing activities such as prepaid care, improving the administration of health service delivery programs, research and experimentation in rate regulation, evaluation of new kinds of manpower (such as physician extenders), and research into ways that hospital costs can be reduced; establishment of a nationwide health planning structure and technical assistance in the development of planning methods; development of common criteria for identification of health scarcity areas, encouraging manpower authorities to increase the output of primary care physicians, and influencing the ultimate geographic location of health manpower now in training; and continued emphasis on primary care providers, emphasis on other needed specialties (such as in mental health), and continued examination of the physician extender concept.

Quality assurance is an important element which seeks to provide a framework for integrating diverse federal health responsibilities into a coherent program to improve the quality of health services in the United States of America. This area acknowledges the critical need for high-quality results, demonstrably improving the health status of the people.

There are four factors which determine the quality of a given episode of health care: effectiveness, safety, cost and patient satisfaction. No one can ensure absolutely that these four determinants of quality will be present to an appropriate degree in every health care situation. Nevertheless, it is the shared responsibility of health professionals and Government to provide a reasonable basis for confidence that action will be taken both to assess whether services meet professionally recognized standards and to correct any deficiencies that may be found. The quality of the assurance process consists of developing and disseminating knowledge regarding the efficacy, safety and cost of medical procedures; developing and disseminating knowledge regarding methods of assessing and improving the quality of health care interventions; and establishing organizational and administrative entities that can use the information developed to assess and improve the quality of performance.

Increasing attention is being devoted to the concept of National Health Insurance (NHI) both in terms of the general principles (which should underlie any NHI proposal) and, more particularly, in what the likely impact of NHI will be on other programs.

Thirty million people under 65 years of age have neither private health insurance nor public assistance in meeting the costs of health care. Moreover, there are additional problems for those 30 million people, and many others as well. While NHI can aid in solving problems of financial access and can stimulate changes in the organization and delivery of care, it cannot, by itself, resolve all problems of the health care system, nor, of course, is it to be equated with a "healthier society" - given the many factors that influence physical well-being more than health care. However, there is a commitment to the following basic principles for NHI: (a) universal and voluntary participation; (b) comprehensive and uniform benefits; (c) building on the strengths of the private health care financing system; (d) dependence on private as well as public funding; (e) reliance on private/public partnership for implementation; and (f) structuring controls and incentives/disincentives to improve the delivery of health care services.

UNITED STATES OF AMERICA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	74,480	17.7	79,995	22.9	84,255	30.8
ENVIRONMENTAL HEALTH SERVICES -----	28,080	6.7	29,995	8.6	31,155	11.4
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	28,080	6.7	29,995	8.6	31,155	11.4
COMPLEMENTARY SERVICES -----	46,400	11.0	50,000	14.3	53,100	19.4
4300 EPIDEMIOLOGICAL SURVEILLANCE	46,400	11.0	50,000	14.3	53,100	19.4
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	346,726	82.3	269,752	77.1	189,483	69.2
HEALTH SYSTEMS -----	346,726	82.3	269,752	77.1	189,483	69.2
5100 GENERAL PUBLIC HEALTH SYSTEMS	150,120	35.6	162,070	46.3	189,483	69.2
5300 PLANNING	196,606	46.7	107,682	30.8	-	-
GRAND TOTAL =====	421,206	100.0	349,747	100.0	273,738	100.0

*LESS THAN .05 PERCENT

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

UNITED STATES OF AMERICA - DETAIL

UNITED STATES OF AMERICA-5100, CONSULTANTS IN SPECIALIZED FIELDS

Short-term consultants are provided to the United States of America in such subjects as mental retardation, public health nursing, gerontology, foreign quarantine, industrial hygiene, cardiovascular and respiratory diseases, accident prevention, and epidemiological studies. Services will continue to be made available upon request.

TOTAL		5	5	9	TOTAL	WR	24,300	27,000	30,600
CONSULTANT MONTHS	WR	9	9	9	PERSONNEL-CONSULTANTS		24,300	27,000	30,600

UNITED STATES OF AMERICA-5101, FIELD OFFICE - UNITED STATES-MEXICO BORDER

This project is connected with health problems on the frontier between the United States of America and Mexico, and its objectives are to encourage and promote the study and joint planning of health activities in the frontier area; support the exchange of epidemiological information between frontier health authorities; protect environmental health; and coordinate nursing personnel, medical anthropology and medical economics. The project aims to strengthen local services on both sides of the border, facilitate the development of joint health programs, and act as the Secretariat for the United States-Mexico Border Health Association.

The United States-Mexico Border Health Association continues to provide the principal mechanism for liaison between the authorities and health workers in both countries in responding to health needs and problems in the area. The Association's Constitution has been revised and amendments made that will contribute to its more effective operation; the new Constitution came into force in 1976. As a result, the Regional Binational Health Councils have assumed a more significant role that will strengthen their contribution to the interchange of experiences. This is a joint project with Mexico-5101.

TOTAL		108	108	108	TOTAL		151,790	158,425	168,678
P-5 CHIEF OF FIELD OFFICE	PR	12	12	12	SUBTOTAL	PR	90,040	98,150	102,628
.0902									
P-5 EPIDEMIOLOGIST	WR	12	12	12	PERSONNEL-POSTS		75,990	83,050	88,078
4.3788					PERSONNEL-CONSULTANTS		1,750	2,000	2,250
P-4 SANITARY ENGINEER	PR	12	12	12	DUTY TRAVEL		4,800	5,600	4,800
.0903					GRANTS		7,500	7,500	7,500
G-7 ADMINISTRATIVE ASSISTANT	PR	12	12	12	SUBTOTAL	WR	61,750	60,275	66,050
.3310									
G-6 SECRETARY	PR	24	24	24	PERSONNEL-POSTS		44,000	47,200	50,700
.0906 .0908					DUTY TRAVEL		2,400	2,800	2,400
G-5 SECRETARY	PR	24	24	24	SEMINAR COSTS		2,500	2,500	2,500
.0907 .4134					SUPPLIES AND EQUIPMENT		6,300	300	2,550
G-4 CLERK	PR	12	12	12	COMMON SERVICES		6,550	7,475	7,900
.3623									
TOTAL		1	1	1					
CONSULTANT MONTHS	PR	1	1	1					

UNITED STATES OF AMERICA-5102, FELLOWSHIPS

This project provides cooperation in training health manpower by granting academic and short-term fellowships.

TOTAL		63	64	73	TOTAL		48,510	56,640	74,460
FELLOWSHIP MONTHS	PR	44	44	51	SUBTOTAL	PR	33,880	38,940	52,020
FELLOWSHIP MONTHS	WR	19	20	22					
					FELLOWSHIPS		33,880	38,940	52,020
					SUBTOTAL	WR	14,630	17,700	22,440
					FELLOWSHIPS		14,630	17,700	22,440

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

UNITED STATES OF AMERICA-5300, HEALTH PLANNING

The principal objective underlying this program is to improve health planning at the local and regional (state-wide) levels in the United States of America with the concomitant effect of improving health planning generally throughout the world. More specifically, this project aims to provide health planners with the following: published comparison of health planning and implementation processes, and the structure and organization of health planning agencies in at least four selected developed and developing countries by mid-1977; published comparison of at least four different methods for determining need and requirements for health services and resources, the use, capabilities and limitations of these methods in selected developed and developing countries, and their relevance to the United States of America local planning situations by the end of 1977; published comparison of at least three different approaches to training of health planners, trainers of health planners and, where possible, lay decision-makers in selected developed and developing countries by mid-1978; and a list of major sources of information on health planning throughout the world and a bibliography by mid-1977.

TOTAL		12	8	-	TOTAL		196,606	107,682	-
		-----	-----	-----			-----	-----	-----
P-4 HEALTH PLANNER	PG	12	8	-					
.4797					SUBTOTAL	PR	20,000	-	-
							-----	-----	-----
TOTAL		19	15	-					
		-----	-----	-----	DUTY TRAVEL		20,000	-	-
CONSULTANT MONTHS	PG	19	15	-					
					SUBTOTAL	PG	174,606	107,682	-
							-----	-----	-----
					PERSONNEL-POSTS		54,457	30,000	-
					PERSONNEL-CONSULTANTS		65,847	59,682	-
					DUTY TRAVEL		16,248	8,000	-
					CONTRACTUAL SERVICES		2,000	10,000	-
					SEMINAR COSTS		16,934	-	-
					PROGRAM SUPPORT COSTS		21,120	-	-

URUGUAY

The Eastern Republic of Uruguay is a country with very peculiar characteristics for a Latin American country. Almost the entire population is of European origin, predominantly of Spanish and Italian ancestry. This may explain the strong European influence in the culture and mores. As a result, and owing to favorable economic factors, the country enjoyed a very long period of sustained growth and prosperity almost continuously but with some ups and downs from the end of the nineteenth century to the middle of the twentieth. During this period Uruguay pioneered social legislation benefitting broad sectors of the population, as, for example, extensive educational facilities and protection against disease and other social hazards.

In the early 1950's, the country began to feel the impact of changes in world markets, such as the decline in value of primary sector products compared with those of the secondary sector. This was aggravated by the absence of programs designed to raise the level of technology and mechanization in the agricultural sector, which would have substantially increased output, and by growing difficulties in marketing those products on world markets. There was also a failure to diversify production and restrictions on exports of industrial sector products. As a consequence of those and other factors, Uruguay is going through an especially critical period in its history, which is characterized by certain contradictions worthy of note. While its economy shows clear signs of deterioration and stagnation, the social indicators still rank Uruguay among the most advanced countries of Latin America in matters of health, education and housing. This could be interpreted as the vestige of the privileged position attained in the past, which can be maintained because very broad sectors of the population were able to cushion the impact of the economic decline and had only to sacrifice certain comforts without being forced down in large numbers to the subsistence level.

It should be noted that, in order to disrupt the process of deterioration referred to above, the Government has formulated a National Development Plan (1973-1977) which is being implemented. A program of gradual economic integration with Argentina has also been set in motion. To that end, important agreements have been signed and have already begun to be applied. Two bridges over the Uruguay River, Paysandú-Colón and Fray Bentos-Puerto Unzué, have been inaugurated, thereby realizing a long-held desire for communication between the two countries. Work on the Salto Grande Dam, an Argentine-Uruguayan binational project on the same river, is moving ahead according to schedule. In addition, extremely important agreements on economic integration have been signed with Brazil.

Uruguay is highly favored by its geography and its climate. Situated between Argentina and Brazil, it has an area of 176,215 km² (Military Geographical Service), lies between 30° and 35° latitudes south, has no high geographical barriers, and communications are easy and distances short. It has an extensive and abundant hydrologic system and a temperature climate with mean temperatures in winter of 9°C and in summer of 25°C. The lowest temperature is about 3°C, the highest about 41°C. Average relative humidity is 73% and average rainfall is about 1,000 mm. per annum.

Uruguay is an agricultural and stockraising country whose main source of foreign exchange is the production and marketing of meat and wool, which makes it especially sensitive to fluctuations in the world market for those commodities. Although there are no entirely reliable recent data on the per capita GDP, it has not shown a satisfactory growth curve in the past decade. Nevertheless, the most recent estimates place it at about US\$920. The structure of the GDP by production sectors and services according to 1967 estimates is as follows: 12.0% from the primary sector, 53.5% from the secondary sector, and 34.5% from the tertiary sector. The inflationary process, very serious in past years, appears to be responding to the severe control measures imposed by the economic authorities, with the result that in 1976 a slight tendency towards stabilization was noted.

Uruguay has a population of 2,763,964, according to the May 1975 population census. Earlier projections had expected it to reach a figure of between 2,900,000 and 3,000,000 by that date. The difference would appear to confirm the impression of the experts that there is a strong wave of emigration, mainly among the 20-35-year age group. Montevideo has 1,229,748 inhabitants, and 1,534,216 live in the interior of the country. The census data are now being processed. According to the only data available (1963 census), the distribution of the economically active population is 19.7% in the primary, 29.7% in the secondary, and 50.6% in the tertiary sectors. The birth rate is 21.7 per 1,000 population and the natural annual increase is 1.2%. The illiteracy rate is 8.5% (1966).

Virtually the entire population has health coverage, and human and material resources are generally very well distributed. Nevertheless, there are some distribution and shortage problems for some resources. One of the basic problems is the lack of coordination and insufficient operational capacity of the health sector, which has a complicated subsectoral structure with poorly defined areas and frequent overlapping of activities. Another significant problem is the degree of deterioration in physical facilities as the result of lack of maintenance. General mortality is 9.7 per 1,000 population (1969) and infant mortality, 42.3 per 1,000 live births (1975), one of the lowest in Latin America, although it should be noted that with some fluctuations it has remained at that level for over 15 years. Life expectancy at birth is about 70 years. The five leading causes of death, which accounted for 67% of the total, were cardiovascular diseases, malignant tumors, cerebrovascular diseases, certain causes of perinatal mortality and accidents (including suicides and homicides).

The country has 16,857 hospital beds, or 5.9 per 1,000 population (1971), distributed as follows: government or state establishments (Ministry of Health), 12,558; other public establishments, 1,111; semi-public (Armed Forces), 145; social security, 1,280; and private, 1,763. Health expenditures are about 6% of the GDP, with the following distribution: social security, 40%; Ministry of Public Health, 25%; other state institutions and Armed Forces, 20%; and private, 15%. The new health authorities wish to reorganize and rationalize all services to the public and bring them within the framework of the National Health Plan being drawn up with a view to total coverage and maximum efficiency. That raises the question of the final structure of the health services.

To combat communicable diseases there are better prospects for streamlining preparation and execution of programs in general and immunization campaigns in particular. Statistical information services are being readapted, monthly reporting has already been regularized, and weekly reports are also expected to become regular. Although malaria has been eradicated, construction of the Salto Grande Dam has altered the ecology of a wide area, and poses the risk of possible reintroduction of malaria, but the health group participating in that project is bearing that possibility in mind. Smallpox has been eradicated and the country produces sufficient glycerinated vaccine for its own consumption. Tuberculosis mortality (less than 10 per 100,000) is one of the lowest in the Hemisphere, and BCG vaccination coverage is good; BCG vaccine is locally produced and of satisfactory quality. There are few reported cases of leprosy. The authorities are concerned about venereal diseases because, while there are no concrete data, the experts agree that they are on the rise, as are the number of cases resisting ordinary treatment. There have been no cases of yellow fever for some years and *Aedes aegypti* has been eradicated from urban areas. The danger of the possible spread of meningococcal meningitis, which struck São Paulo, Brazil, led the authorities to undertake a massive vaccination campaign, which was carried out in the second half of July 1976 and covered 76.09% of the total population. The program of sprayings against triatomines is continuing in several departments in the north of the country.

In the area of maternal and child health, a national program has been formulated and, although it did not obtain financial assistance from UNFPA, it has been launched with local funds within the context of the program priorities established by the authorities. With the support of PAHO/WHO, a mental health campaign is being carried out and gradually expanded through seminars for physicians and nurses of general hospitals, the purpose being to use these resources mainly for emergency psychiatric treatment in the interior of the country. Cancer ranks second as a cause of death after cardio-circulatory diseases, and accounts for 20% of all deaths. Efforts are being made to launch a more extensive program of early detection.

Environmental sanitation in Uruguay covers activities ranging from basic sanitation to the most complicated sanitation measures. It is one of the priority areas in the National Health Plan which is being prepared. Coverage by the public drinking water supply services is relatively satisfactory compared with the other countries of Latin America, but outside Montevideo the picture is less than satisfactory, since 65% of the houses without piped water service are in the interior of the country. This figure rises to 75% if small towns are included. Coverage by public sewerage systems is much more restricted; outside Montevideo, sewerage systems exist only in towns with over 10,000 population, and cover only 40% of occupied dwellings. Coverage nationwide amounts to 55%.

According to the census, there are 838,910 dwellings, 390,581 in Montevideo and 448,329 in the interior. The inhabitant/dwelling ratio is 3.3:1. Refuse disposal, particularly in small towns in the interior, consists of dumping directly on the ground with no attempt at landfill to prevent disease. Problems of pollution are serious off the coast of Montevideo and in some village watercourses due to the dumping of untreated household and industrial wastes. An IDB loan, which is about to be awarded in the order of US\$25 million, will be used to clean up the Montevideo beaches. Preliminary studies for cleaning up Montevideo Bay have been initiated.

There are serious problems in nursing, such as the shortage of university-trained personnel, part of which is emigrating in search of better salaries; the job freeze, which prevents the utilization of auxiliary nursing staff in line with the needs of the services, despite the fact that the country has sufficient trained human resources at that level; the shortage of material resources; and, lastly, the low operational capacity of the whole state health subsector. The program of activities for 1976, which emphasized improvement of patient care in establishments in the interior of the country, had to be abandoned as a result of a decision by the new national counterpart staff appointed at the beginning of the year.

Uruguay has no public health laboratory and no national laboratory program. It has institutions working in isolation, uncoordinated, and subject to the authority of different administrative units. Although there is no properly organized system of epidemiological surveillance, an attempt is being made to change that situation, and some progress has been achieved.

Mention has already been made of the complexity and lack of coordination in the health sector. In order to improve services and extend coverage to the whole population, the authorities are planning to institute effective coordination between subsectors, and gradually to take technico-administrative rationalization measures in the area serviced by the Ministry of Public Health and in the social security area. The Planning Division of the Ministry of Public Health is responsible for translating into programs the general guidelines established at the political level. It is also responsible for providing programming and advisory services to all the levels that require them, to enable them to program their activities within that frame of reference. It is also responsible for supervising and evaluating the overall conduct of programs, as well as for promoting the necessary intrainstitutional integration and coordination.

Efforts are being made to strengthen and expand the present statistical system, which is weak, primarily covers the area of the Ministry of Public Health, and has poor operational capacity. A project financed by UNFPA in the amount of US\$86,000 for a two-year period has just been put into operation. It is intended to strengthen the collection of vital statistics.

In the area of human resources, an important agreement was concluded between the Ministry of Public Health and the Faculty of Medicine and formalized in an agreement for the coordination of activities. Studies have been started to update the curriculum of the Faculty of Medicine. The authorities are considering the possibility of establishing a School of Public Health. Well-trained hospital administrators are urgently needed. There has been a merger of the University School of Nursing and the School of Nursing of the Ministry of Public Health, the enrollment of both of which was declining, apparently because there were few incentives to enter the nursing profession. The Engineering Faculty is training specialists in sanitary engineering, but it also has few students for the same reasons pointed out for nursing.

A broad program has been started to repair and update installed capacity. It includes a sectoral study of the network of establishments now in operation; the design of the desired network; and the formulation of a long-term program for remodeling, replacing and incorporating the physical plants deemed necessary. It also sets the timetable and site schedules. The program will include subprograms for maintenance, essential equipment, critical human resources, and programming of activities at the establishment level.

While it would appear from the available statistics that Uruguay is spending enough on health, it is difficult to rationalize and channel expenditures because 55% of all health outlays, which goes to social security and private medical care, depends on decisions taken voluntarily by families. The Ministry of Public Health has to look after 74% of all hospital beds in the country with only 25% of the total health expenditures.

URUGUAY
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	57,709	19.0	38,810	12.9	38,540	12.0
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	21,320	7.0	23,810	7.9	22,020	6.9
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COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	7,500	2.5	7,500	2.5	8,000	2.5
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	5,310	1.7	5,155	1.7	5,060	1.6
1500 MENTAL HEALTH	6,010	2.0	8,655	2.9	6,460	2.0
1700 CHRONIC DISEASES	2,500	.8	2,500	.8	2,500	.8
ENVIRONMENTAL HEALTH SERVICES	32,079	10.6	11,000	3.7	12,460	3.8
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2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	7,010	2.3	8,000	2.7	9,460	2.9
2100 WATER SUPPLY AND EXCRETA DISPOSAL	21,769	7.2	3,000	1.0	3,000	.9
3000 OCCUPATIONAL HEALTH	3,300	1.1	-	-	-	-
COMPLEMENTARY SERVICES	4,310	1.4	4,000	1.3	4,060	1.3
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4100 NURSING	4,310	1.4	4,000	1.3	4,060	1.3
II. DEVELOPMENT OF THE INFRASTRUCTURE	246,460	81.0	261,560	87.1	283,210	88.0
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	181,155	59.5	194,575	64.8	213,885	66.5
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5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	69,500	22.8	79,925	26.6	89,120	27.7
5100 GENERAL PUBLIC HEALTH SYSTEMS	38,530	12.7	20,120	6.7	23,040	7.2
5200 MEDICAL CARE SYSTEMS	31,125	10.2	48,330	16.1	50,965	15.8
5500 MANAGEMENT SYSTEMS	42,000	13.8	46,200	15.4	50,760	15.8
DEVELOPMENT OF HUMAN RESOURCES	24,330	8.0	23,810	7.9	23,920	7.4
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6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	15,830	5.2	14,310	4.8	14,420	4.5
6100 PUBLIC HEALTH	5,000	1.6	5,500	1.8	5,500	1.7
6400 ENVIRONMENTAL SCIENCES	3,500	1.2	4,000	1.3	4,000	1.2
PHYSICAL RESOURCES	40,975	13.5	43,175	14.4	45,405	14.1
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7400 MAINTENANCE OF HEALTH CARE FACILITIES	40,975	13.5	43,175	14.4	45,405	14.1
GRAND TOTAL	304,169	100.0	300,370	100.0	321,750	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

URUGUAY
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA VI CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA VI (PR)	<u>Program Planning and General Activities</u>			90	48,055	90	50,945	90	53,950
	Area Representative	0.0310	D-1						
AMRO-1360 (PR)	<u>Maternal and Child Health and Family Welfare</u>			84	9,225	84	13,735	84	14,585
	Medical Officer	0.2117	P-5						
AMRO-4160 (PR)	<u>Nursing</u>			102	7,940	102	12,460	102	13,245
	Nurse	0.0895	P-4						
AMRO-4360 (WR)	<u>Epidemiological Surveillance</u>			71	6,085	71	8,820	71	9,345
	Epidemiologist	4.0846	P-4						
AMRO-5360 (PR)	<u>Health Systems - Planning</u>	0.0915	P-5	68	10,870	68	11,500	68	12,185
	Health Planner								
AMRO-5460 (PR)	<u>Statistics and Information Systems</u>			33	2,790	33	4,085	33	4,355
	Statistician	0.4853	P-3						
AMRO-5560 (PR)	<u>Management Systems</u>			117	15,640	117	16,560	117	17,575
	Administrative Methods Officer	0.4590	P-4						
AMRO-6260 (WR)	<u>Development of Human Resources - Medicine</u>			72	4,910	72	7,600	72	8,010
	Medical Educator	4.3685	P-5						
	<u>Total All Programs</u>			637	105,515	637	125,705	637	133,250

* The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

URUGUAY - DETAIL

URUGUAY-0100, COMMUNICABLE DISEASE CONTROL

Communicable diseases, in spite of their low morbidity and mortality rates, continue to be a problem in the country. Cases of diseases preventable by vaccination are reported, although it is difficult to establish morbidity trends due to deficiencies in data-gathering. Cardiovascular diseases, cancer, and accidents are of epidemiologic importance. Chagas' disease is present in 11 of the country's 19 Departments.

The aim of this project is to reduce morbidity, mortality, and disabilities resulting from communicable diseases to levels consistent with the situation achieved by the country in other fields and, if possible, eradicate them.

TOTAL	WR	7,500	7,500	8,000
SUPPLIES AND EQUIPMENT		6,500	6,500	6,500
COURSE COSTS		1,000	1,000	1,500

URUGUAY-1300, MATERNAL AND CHILD HEALTH

Although maternal and child mortality rates in Uruguay are low for Latin America, they are not homogeneous, being higher among certain marginal groups. The project seeks to achieve more and better health coverage for mothers and children through a national program carried out in pilot areas by the health authorities in coordination with other institutions. Training is also included.

TOTAL		3	3	3	TOTAL	PR	5,310	5,155	5,060
FELLOWSHIP MONTHS	PR	3	3	3	SUPPLIES AND EQUIPMENT		2,000	1,500	2,000
					FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		1,000	1,000	-

URUGUAY-1500, MENTAL HEALTH

Mental health care has not developed on a par with other health services. There is no reliable information on the real magnitude of the problem, although a high incidence of mental disease is known to exist. Psychiatric hospitals, nearly all operated by the Ministry of Public Health, are poorly maintained and organized and have few resources.

The purpose of this project is to set up a national mental health program to prevent mental impairment through early diagnosis and suitable treatment, to assist in rehabilitating the patient and returning him to society as a useful individual, to improve and rationalize the use of physical resources, and to train available staff.

TOTAL		1	1	1	TOTAL	WR	6,010	8,655	6,460
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	WR	3	3	3	COURSE COSTS		1,000	3,000	-

URUGUAY-1700, CHRONIC DISEASES

Because of the long life expectancy in Uruguay, there is a high incidence of chronic diseases. Despite the known difficulties of conducting nationwide surveys, the National Rheumatology Institute is endeavoring to carry out an epidemiologic study of the problem.

This project seeks to provide training to appropriate medical staff in the interest of better care of the patients. The project specifically involves an increase in patient care at the Institute; the epidemiologic study, now nearing completion; and the conduct of seminars, lectures and therapeutic, clinical and radiologic research.

TOTAL	WR	2,500	2,500	2,500
SUPPLIES AND EQUIPMENT		1,500	1,500	1,500
COURSE COSTS		1,000	1,000	1,000

URUGUAY-2000, ENVIRONMENTAL SANITATION

The purpose of this project is to integrate the environmental health policies and programs into the country's development plans by establishing a global system of health coverage that will coordinate the activities of the different institutions involved. Its basic aim is to provide technical advisory services to the Environmental Health Division of the Ministry of Public Health, the municipal authorities of Montevideo, the State Sanitation Authority, the School of Engineering and Surveying, and the honorary committees concerned with planning, design, programming, operation and maintenance of environmental health programs.

Special support is being extended in connection with environmental problems relating to construction of the Salto Grande dam, a joint Uruguay-Argentina project of utmost economic, political and social importance assigned high priority for the country's development. Some of these activities are channeled through specific projects including international assistance.

FUND				FUND			
1977 1978 1979				1977 1978 1979			
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FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

URUGUAY-5100, DEVELOPMENT OF HEALTH SERVICES

The purpose of this project is to collaborate with the authorities in fostering the development of health services to make it possible to provide the entire population of the country with complete and timely care equally accessible to all. To this end, efforts will be made to increase knowledge of the health system, its components and interactions; to arrive at more precise objectives; and to promote the utilization of the national health plan as the referential basis for the system's activities, which will gradually be restructured with the necessary speed for achieving those objectives.

TOTAL		2	2	2	TOTAL	PR	38,530	20,120	23,040
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		34	12	12	SUPPLIES AND EQUIPMENT		6,950	3,500	4,000
FELLOWSHIP MONTHS	PR	34	12	12	FELLOWSHIPS		26,180	10,620	12,240

URUGUAY-5200, MEDICAL CARE AND HOSPITAL ADMINISTRATION

The country's medical care facilities are the responsibility of numerous institutions. The resulting difficulties in achieving adequate coordination among them leads to duplication of services, which in turn limits coverage, impairs quality and increases costs. Three-fourths of the country's hospital beds are in Ministry of Public Health hospitals.

The purpose of the project is to contribute to an improvement in the health of the population through better administration of medical and hospital care. Its objectives include assistance in improving the organization and operation of the Ministry's Health Care Division; improving the organization and supervision of peripheral services, hospitals and outpatient clinics; fostering the regionalization of health services throughout the country; and consolidating the existing regionalization demonstration area as an experimental field for changes and initiatives to be introduced in the sector.

TOTAL		12	12	12	TOTAL	PR	31,125	48,330	50,965
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	PERSONNEL-POSTS		26,315	41,675	43,905
4852					DUTY TRAVEL		1,500	1,500	1,500
TOTAL		3	3	3	SUPPLIES AND EQUIPMENT		-	1,500	2,500
FELLOWSHIP MONTHS	PR	3	3	3	FELLOWSHIPS		2,310	2,655	3,060
					COURSE COSTS		1,000	1,000	-

URUGUAY-5500, MANAGEMENT OF HEALTH SERVICES

The administrative infrastructure of the Ministry of Public Health at the central and hospital levels lacks suitable organization and procedures and rational coordination of functions for meeting present needs in the areas of personnel, supplies, accounting, budget and maintenance. The administrative system has remained stagnant for many years and has serious shortcomings in regard to integration of activities of the Ministry's administrative staff with that of other areas of the sector.

The purpose of this project is to further the goals and objectives of the Ministry through the development, updating and strengthening of the administrative system, the rationalization of methods and procedures, and the coordination and interrelation of the administrative system with the entire health system, to assure a more effective operating capacity and better use of available human resources.

TOTAL		12	12	12	TOTAL	WR	42,000	46,200	50,760
P-4 ADMIN. METHODS OFFICER	WR	12	12	12	PERSONNEL-POSTS		38,000	41,200	44,700
4,3608					DUTY TRAVEL		1,500	1,500	1,500
TOTAL		-	-	3	SUPPLIES AND EQUIPMENT		1,000	1,500	-
FELLOWSHIP MONTHS	WR	-	-	3	FELLOWSHIPS		-	-	3,060
					COURSE COSTS		1,500	2,000	1,500

URUGUAY-6001, COLLABORATION WITH THE UNIVERSITY OF THE REPUBLIC

The gradual dissociation between the training of professional health workers and the requirements of technological advance and evolution of the country's health sector is becoming increasingly apparent.

The purpose of this project is to assist the School of Medicine in its efforts to adjust the training of its students to the demands of the country's health situation, to which end efforts are being made to improve and update teaching methods and curriculum content.

TOTAL		2	2	2	TOTAL	WR	15,830	14,310	14,420
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		9	6	6	SUPPLIES AND EQUIPMENT		3,500	3,000	1,500
FELLOWSHIP MONTHS	WR	9	6	6	FELLOWSHIPS		6,930	5,310	6,120

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

URUGUAY-6100, TRAINING OF HEALTH PERSONNEL

The development and efficient operation of the health sector is hindered by both quantitative and qualitative gaps in the supply of health personnel. Although the possibility of quantitative improvement is limited by economic constraints within and outside the sector, better training would reduce the impact of the shortage by bringing about more efficient utilization of the staff available.

This project is designed to furnish assistance in the effort to assure continuing and progressive improvement of manpower through training programs involving courses, seminars and working groups designed to implement the policies and priorities laid down at the decision-making level.

TOTAL	PR	5,000	5,500	5,500
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COURSE COSTS		5,000	5,500	5,500

URUGUAY-6400, SANITARY ENGINEERING EDUCATION

The purpose of this project is to help improve the performance of technical and paratechnical personnel in the fields of sanitary engineering and environmental sciences by strengthening the country's scientific and technological structure applicable to improvement of the environment and protection of natural resources against pollution.

This dissemination of technology is carried out by means of intensive short courses, seminars and applied research. Each activity is executed under a teamwork approach, and the findings are disseminated to the environmental protection sectors by means of a manual containing information developed in each course, which is considered essential for the planning of programs for the improvement of environmental techniques. The manual is distributed in Uruguay and abroad to agencies concerned with environmental protection, health and development.

TOTAL	WR	3,500	4,000	4,000
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SUPPLIES AND EQUIPMENT		500	1,000	1,000
COURSE COSTS		3,000	3,000	3,000

URUGUAY-7400, MAINTENANCE AND IMPROVEMENT OF HEALTH INSTALLATIONS

Uruguay has approximately 15,300 hospital beds, of which 13,366 are in 69 public-sector facilities of varying type and size. Because of the age of the public hospitals (between 30 and 150 years) and the absence of a policy of regular maintenance, their physical plants, installations and equipment are badly run down and obsolete. This is an obstacle to rationalization of medical care services and affects the quantity and quality as well as cost of services.

This project seeks to bring about an improvement of installed capacity through careful short-, medium- and long-term planning to establish the best sequence for remodeling and replacement of physical plants and determine the resources needed for this purpose. Efforts will also be made to establish subprograms on minimum maintenance and equipping, critical human resources, and planning of activities at the individual hospital level.

TOTAL		12	12	12	TOTAL	PR	40,975	43,175	45,405
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P-4 ARCHITECT	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.4591					DUTY TRAVEL		1,500	1,500	1,500

VENEZUELA

Situated in the northern part of South America, Venezuela covers an area of 912,050 km² and has a population, according to a mid-1975 estimate, of 11,993,062. The population has been increasing at an annual rate a little over 3.5%. Fertility rates have been consistently high until recent years, with little variation. Of the total population, 75.4% lives in communities of more than 2,500 inhabitants, and this figure is expected to rise to 80% by the year 2000. Future growth of the urban population is projected at lower than recent year levels. Venezuela's population is predominantly young, with 45% under 15 years of age. The population is concentrated in the coastal areas and in the mountain valleys, while the southern region of the country, which occupies one-third of the territory, is inhabited by less than 1% of the total population.

The Venezuelan economy is booming as a result of the high prices of petroleum and petroleum derivatives. Per capita income was estimated at US\$1,200 in 1974; however, this income is very unevenly distributed; it is believed that 20% of the population receives more than two-thirds of the total product of the economy. The petroleum and allied industries are those that contribute most to the gross domestic product, followed by manufacturing, trade and banking, rents and interest, and services. The trend in agriculture is toward no change or even a decline.

Of the economically active population (15 years of age and over), representing 28.1% of the total population, 93.8% are classified as employed and the remaining 6.2% as unemployed. Underemployment is considered to be high. The trade balance and the balance of payments show large favorable balances, and net international reserves as of 30 June 1975 amounted to US\$7,825 million. The pressures of inflation, domestic as well as foreign, have driven up the prices of most goods and services, and have led to demands for wage and salary increases. These demands have resulted in labor conflicts, including strikes, in various sectors of the economy. The general level of employment has not been affected. However, farm workers and technicians in various fields are in short supply, and measures are being taken to facilitate the immigration of skilled manpower. In March the Government announced its V National Plan, covering the period 1976-1980, which outlines the country's overall and sectoral development problems, sets priorities, indicates strategies for each sector, and delineates the sectoral programs.

According to provisional official data, 74,574 deaths occurred during 1975. Of these, 60,754 (81.5%) resulted from known causes and 13,820 (18.5%) from undetermined causes. Within the former group, heart diseases were the leading cause of mortality, accounting for 82.2 deaths per 100,000 inhabitants, followed by cancer with 54.0 and accidents with 55.7. Perinatal mortality held fourth place with 46.7 deaths; pneumonia fifth (38.9); enteritis and other diarrheal diseases sixth (35.5); cerebrovascular diseases seventh (30.5); suicides and homicides eighth (12.8); congenital anomalies ninth; and diabetes tenth. Infectious diseases as a whole were the cause of 8,939 deaths, representing 14.7% of deaths for which the cause was diagnosed (a rate of 74.5 per 100,000 inhabitants). Within this group, enteritis and other diarrheal diseases resulted in the largest number of deaths (4,262) followed by septicemia (1,254), tuberculosis (937), measles (747), Chagas' disease (549), dysentery (231), tetanus (186), pertussis (106), helminthiasis (201), and syphilis (55).

The epidemiologic reporting network has continued to expand. At the end of 1975 it covered a total of 608 localities having 84.1% of the country's population, as compared with 589 localities and 71.9% of the population in 1971. The number of reported cases of diseases subject to compulsory reporting rose from 978,000 in 1971 to 1,132,000 in 1974. The number of reported cases of most infectious diseases is lower than or similar to the yearly average reported during 1970-1974. This is attributed to vaccination and other preventive programs.

Recent official estimates indicate that, until very recently, for reasons related to income distribution, 70% of the population did not fulfill minimum nutrition requirements and was subject to significant deficiencies in calorie and protein intake. About 12% of the population shows symptoms of mental disease of one kind or another. Infant mortality increased from 49.2 per 1,000 live births in 1970 to 53.8 in 1973, and then declined to 45.8 in 1974. Neonatal mortality increased from 22.9 in 1970 to 23.4 in 1973, and dropped to 22.3 in 1974. Postnatal mortality rose from 25.3 to 30.4 and then declined to 23.4 in the same years. These rates are significantly higher in rural areas and in small and medium-size communities than in the more developed urban areas.

It is estimated that 100% of the urban population is served by water supply systems and that approximately half has sewerage service. These percentages diminish to 49% and 2%, respectively, for those living in communities with less than 5,000 inhabitants.

Solid waste disposal is unsatisfactory, particularly in the major urban areas. Air, water and soil pollution continues to increase as a result of urban growth and industrial development, greater use of herbicides and pesticides, more automotive vehicles, and other factors stemming from economic growth.

No significant changes have occurred with respect to the more prevalent zoonoses, such as rabies, brucellosis, equine encephalitis, foot-and-mouth disease, tuberculosis, leptospirosis and hydatidosis.

Production of most biologicals has increased significantly, in some cases having reached the point of being able to satisfy the requirements of public health programs. Plant availability, however, places a constraint on expansion of output, despite sufficient technical capacity and resources. Drug, food and cosmetics analysis has also increased considerably.

At the start of the current year Venezuela had 380 hospitals and health centers with a total of 35,867 beds. Of the total number of hospitals and health centers, 186, with 29,878 beds (83% of the total number of beds), belong to the public subsector; the private subsector has 194 hospitals with 5,989 beds, or 17% of the total beds available. The Government has indicated that the present ratio of three beds per 1,000 inhabitants is not satisfactory and needs to be increased. The increase should be concentrated in those areas of the country where the ratio is lower than in the major cities.

The number of inhabitants per physician is approximately 950, and efforts are being made to further improve this ratio. Geographic distribution of physicians is considered unsatisfactory, and the Government has announced its intention of bringing the physician-inhabitant ratio in rural communities as close as possible to that in the urban centers. The number of dentists, sanitary engineers, pharmacists, biologists and other health professionals per inhabitant is considered unsatisfactory. There is an acute shortage of nurses, nurses aides, health inspectors and skilled administrative officials.

The funds assigned by the Government to the health sector represent slightly more than 10% of the budget for current expenditures, a level considered insufficient to meet the demands for health services, particularly in view of rising costs of inputs. The operating capacity of the health services is being seriously impaired by the following factors, among others: the large number of institutions making up the health sector; the lack of uniformity in administrative systems and how they are applied; an insufficiency of written regulations and procedures; shortcomings in planning, programming and control of activities; poorly defined information requirements; little coordination of the mechanisms for data collection, processing and use; and gaps in the mechanisms for systematic communication of policies, standards, methods and other management tools.

Efforts are being made to develop programs at regional and local levels for the maintenance of the buildings and equipment used in the health programs. Research on public health problems is limited and, in some cases, not sufficiently coordinated.

The Government is receiving technical cooperation for health sector activities from specialized agencies of the UN and the OAS and from various foreign governments.

VENEZUELA
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
1. PROGRAM OF SERVICES =====	838,622	65.8	463,215	57.0	489,125	56.2
SERVICES TO INDIVIDUALS	111,975	8.7	133,165	16.5	134,305	15.5
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	7,320	.6	8,310	1.0	9,520	1.1
0400 TUBERCULOSIS	41,475	3.2	43,675	5.4	45,905	5.3
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	25,810	2.0	38,745	4.8	30,260	3.5
1400 NUTRITION	24,650	1.9	28,125	3.5	32,300	3.7
1700 CHRONIC DISEASES	12,720	1.0	14,310	1.8	16,320	1.9
ENVIRONMENTAL HEALTH SERVICES	686,177	53.9	290,465	35.6	309,600	35.5
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	23,379	1.8	16,965	2.1	19,380	2.2
2300 ENVIRONMENTAL POLLUTION						
2300 PROGRAM PLANNING AND GENERAL ACTIVITIES	36,998	2.9	150,500	18.4	126,000	14.4
3000 OCCUPATIONAL HEALTH	15,790	1.2	18,045	2.2	20,740	2.4
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	510,275	40.1	-	-	-	-
3200 FOOT-AND-MOUTH DISEASE	-	-	-	-	31,270	3.6
3300 ZCONGSES	92,415	7.3	97,955	12.0	102,690	11.8
3500 QUALITY CONTROL OF FOODSTUFFS	7,320	.6	7,000	.9	9,520	1.1
COMPLEMENTARY SERVICES	40,470	3.2	39,585	4.9	45,220	5.2
4200 LABORATORIES	23,130	1.8	19,965	2.5	22,780	2.6
4500 REHABILITATION	17,340	1.4	19,620	2.4	22,440	2.6
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	437,605	34.2	349,995	43.0	381,480	43.8
HEALTH SYSTEMS	133,650	10.5	176,185	21.6	195,995	22.5
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	51,275	4.0	71,355	8.8	84,390	9.7
5100 GENERAL PUBLIC HEALTH SYSTEMS	82,375	6.5	104,830	12.8	111,605	12.8
5200 MEDICAL CARE SYSTEMS	-	-	-	-	-	-
5500 MANAGEMENT SYSTEMS	-	-	-	-	-	-
DEVELOPMENT OF HUMAN RESOURCES	186,895	14.6	166,210	20.5	185,485	21.3
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	50,835	4.0	46,095	5.7	65,125	7.5
6100 PUBLIC HEALTH	15,790	1.2	18,045	2.2	20,740	2.4
6200 MEDICINE	29,270	2.3	33,435	4.1	38,420	4.4
6300 NURSING	18,490	1.4	21,045	2.6	24,140	2.8
6400 ENVIRONMENTAL SCIENCES	7,710	.6	8,655	1.1	9,860	1.1
6500 VETERINARY MEDICINE	16,180	1.3	18,390	2.3	21,080	2.4
6600 DENTISTRY	48,620	3.8	20,545	2.5	6,120	.7
PHYSICAL RESOURCES	117,060	9.1	7,600	.9	-	-
7300 PRODUCTION OF BIOLOGICALS	53,960	4.2	7,600	.9	-	-
7400 MAINTENANCE OF HEALTH CARE FACILITIES	63,100	4.9	-	-	-	-
GRAND TOTAL =====	1,276,227	100.0	813,210	100.0	870,605	100.0

*LESS THAN .05 PERCENT

VENEZUELA
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			30	19,575	30	23,460	30	24,805
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			70	10,325	70	12,030	70	13,075
	Medical Officer	0.0610	P-4						
AMRO-1310(WR/WF)	<u>Maternal and Child Health and Family Welfare</u>			136	17,955	136	20,800	136	22,260
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-1410 (WR)	<u>Nutrition</u>			60	4,925	60	7,750	60	8,415
	Medical Officer	4.0885	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			42	8,040	42	8,525	42	9,020
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			37	5,575	37	6,015	37	6,475
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			48	3,750	48	5,945	48	6,310
	Nurse	0.0887	P-4						
AMRO-4410 (PR)	<u>Health Education</u>			70	9,355	70	10,060	70	10,660
	Health Education Specialist	0.0918	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			52	7,560	52	8,180	52	8,815
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			41	5,200	41	5,570	41	5,930
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			40	5,110	40	5,475	40	5,825
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			39	6,340	39	6,790	39	7,230
	Administrative Methods Officer	0.0917	P-4						
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			44	4,810	44	5,170	44	5,515
	Nurse Educator	0.0604	P-3						
	Total All Programs			709	108,520	709	125,770	709	134,335
	=====			=====	=====	=====	=====	=====	=====

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

VENEZUELA - DETAIL

VENEZUELA-0100, COMMUNICABLE DISEASES

The objective of this project is to cooperate in the organization of studies, definition of functions and drafting of programs for the epidemiology and epidemiological surveillance services now being developed in the country at the central, regional and local levels.

The success of these activities will effectively contribute to an increase in life expectancy at birth, a drop in infant mortality and in mortality in the 1-4 year age group, and a reduction in morbidity and mortality from communicable diseases which can be prevented by vaccination.

ICTAL		1	1	1	TOTAL	WR	7,320	8,310	9,520
		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					FELLOWSHIPS		4,620	5,310	6,120
TOTAL		6	6	6					
		-----	-----	-----					
FELLOWSHIP MONTHS	WR	6	6	6					

VENEZUELA-0400, TUBERCULOSIS CONTROL

The aims of this project include design and implementation of methodology for programming and follow-up of tuberculosis control activities included in the health infrastructure, and the carrying out of operational and epidemiological research.

TOTAL		12	12	12	TOTAL	PR	41,475	43,675	45,905
		-----	-----	-----			-----	-----	-----
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.4008					DUTY TRAVEL		2,000	2,000	2,000

VENEZUELA-1300, FAMILY HEALTH

The objectives of this project are to strengthen maternal and child health programs, draw up a national mental health program, and draft a coordinated program of dental care. It is intended, for the 1977-1980 budgetary period, to train professional personnel in maternal and child care, mental health, and dentistry; improve existing services and organize such services where there are none; and identify specific areas for study in these fields.

TOTAL		3	2	2	TOTAL	PR	25,810	38,745	30,260
		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	PR	3	2	2	PERSONNEL-CONSULTANTS		8,100	6,000	6,800
					FELLOWSHIPS		17,710	32,745	23,460
TOTAL		23	37	23					
		-----	-----	-----					
FELLOWSHIP MONTHS	PR	23	37	23					

VENEZUELA-1400, NUTRITION

The objectives of this project are to encourage formulation of a national nutrition and food policy, foster development and adoption of a nutrition program integrated with the health services, strengthen nutrition and dietary education, and promote expansion of the program for the prevention of endemic goiter. The training of personnel from the National Institute of Nutrition and educational institutions and coordination of teaching and the nutrition service are planned for the period 1977-1980.

TOTAL		2	2	2	TOTAL	PR	24,650	28,125	32,300
		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					FELLOWSHIPS		19,250	22,125	25,500
TOTAL		25	25	25					
		-----	-----	-----					
FELLOWSHIP MONTHS	PR	25	25	25					

VENEZUELA-1700, CANCER AND CHRONIC DISEASES

The objectives of this project are to collaborate in the formulation, organization, implementation and evaluation of chronic disease programs, especially cardiovascular diseases, cancer and diabetes, and the gradual incorporation of some activities in present health services; to cooperate in the designing of epidemiological research on diabetes and neoplastic and cardiovascular diseases; and to provide advisory services for the training of professional, technical and auxiliary personnel in order to expand coverage of these programs.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	-----	-----	-----		----	-----	-----	-----
							\$	\$	\$
TOTAL		3	3	3	TOTAL	MR	12,720	14,310	16,320
CONSULTANT MONTHS	MR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		6	6	6	FELLOWSHIPS		4,620	5,310	6,120
FELLOWSHIP MONTHS	MR	6	6	6					

VENEZUELA-2000, ENVIRONMENTAL SANITATION

The objective of this project is to provide technical advisory services in selected areas of environmental sanitation, particularly with regard to strengthening water supply and liquid waste disposal programs, air contamination, protection against ionizing radiations, industrial hygiene, occupational health, recovery and final disposal of solid wastes, and training of appropriate personnel.

TOTAL		6	3	3	TOTAL		23,379	16,965	15,380
CONSULTANT MONTHS	PW	3	-	-	SUBTOTAL	PW	8,349	-	-
CONSULTANT MONTHS	MR	3	3	3	PERSONNEL-CONSULTANTS		8,349	-	-
TOTAL		9	9	9	SUBTOTAL	MR	15,030	16,965	19,380
FELLOWSHIP MONTHS	MR	9	9	9	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
					FELLOWSHIPS		6,930	7,965	9,180

VENEZUELA-2300, ENVIRONMENTAL POLLUTION RESEARCH CENTER

The objectives of this project are to set up an overall program of applied research directed towards the protection, preservation and improvement of the quality of the environment; to coordinate and develop the necessary human resources and materials for protection and improvement of the environment; and to provide advisory services to the Government on problems concerning environmental quality.

TOTAL		7	12	12	TOTAL		36,998	150,500	126,000
P-4 PROJECT MANAGER	UNDP	-	12	12	SUBTOTAL	PG	36,998	-	-
4.3563					PERSONNEL-POSTS		25,195	-	-
P-4 SANITARY ENGINEER	PG	7	-	-	PERSONNEL-CONSULTANTS		11,303	-	-
.3563 .4694					DUTY TRAVEL		500	-	-
TOTAL		3	23	14	SUBTOTAL	UNDP	-	150,500	126,000
CONSULTANT MONTHS	PG	3	-	-	PERSONNEL-POSTS		-	57,360	63,000
CONSULTANT MONTHS	UNDP	-	23	14	PERSONNEL-CONSULTANTS		-	92,000	63,000
					DUTY TRAVEL		-	1,140	-

VENEZUELA-3000, INDUSTRIAL HYGIENE

The basic purpose of this project is to cooperate with national health authorities, particularly the Ministry of Health and Social Welfare, in the improvement of operational potential and training of professional personnel for the formation of a dynamic infrastructure which can expand coverage to include workers in the diverse industrial sectors.

TOTAL		1	1	1	TOTAL	PR	15,790	18,045	20,740
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		17	17	17	FELLOWSHIPS		13,090	15,045	17,340
FELLOWSHIP MONTHS	PR	17	17	17					

VENEZUELA-3100, VETERINARY PUBLIC HEALTH

The objectives of this project are to increase animal production and productivity through the control of the principal diseases which affect the nation's livestock; to set up a program to control foot-and-mouth disease, brucellosis, bovine tuberculosis, and paralytic rabies in their early stages; and to improve knowledge on other diseases that affect livestock, such as leptospirosis, Venezuelan equine encephalitis, and parasitic diseases.

FUND					FUND				
1977 1978 1979					1977 1978 1979				
-----					-----				
					\$ \$ \$				
TOTAL					PG	510,275	-	-	
-----					-----				
P-4	BACTERIOLOGIST	PG	12	- -	PERSONNEL-POSTS	240,183	-	-	
	.4925				PERSONNEL-CONSULTANTS	35,547	-	-	
P-4	ECOLOGIST	PG	12	- -	DUTY TRAVEL	10,000	-	-	
	.4509				SEMINAR COSTS	15,000	-	-	
P-4	STATISTICIAN	PG	12	- -	SUPPLIES AND EQUIPMENT	5,601	-	-	
	.4508				FELLOWSHIPS	188,944	-	-	
P-4	VACCINE CONSULTANT	PG	14	- -	COURSE COSTS	15,000	-	-	
	.4505 .4506								
P-4	VETERINARIAN	PG	12	- -					
	.4551								
P-4	VIRDOLOGIST	PG	4	- -					
	.4510								
P-3	HEALTH EDUCATION SPECIALIST	PG	12	- -					
	.4926								
TOTAL						10	- -		
-----					-----				
CONSULTANT MONTHS					PG	10	- -		
TOTAL						270	- -		
-----					-----				
FELLOWSHIP MONTHS					PG	270	- -		

	FUND	1977	1978	1979
	----	----	----	----
TOTAL		1	1	1
CONSULTANT MONTHS	WR	1	1	1
TOTAL		6	-	6
FELLOWSHIP MONTHS	WR	6	-	6

	FUND	1977	1978	1979
	----	-----	-----	-----
TOTAL	WR	7,320	7,000	9,520
PERSONNEL-CONSULTANTS		2,700	3,000	3,400
SEMINAR COSTS		-	4,000	-
FELLOWSHIPS		4,620	-	6,120

VENEZUELA-4200, LABORATORY SERVICES

The objective of this project is to bring the national network of laboratories up to a level which enables them to meet the demands of the health services. This requires an improvement in the setting of standards and supervision at the central level.

TOTAL		6	4	4
CONSULTANT MONTHS	WR	6	4	4
TOTAL		9	9	9
FELLOWSHIP MONTHS	WR	9	9	9

TOTAL	WR	23,130	19,965	22,780
PERSONNEL-CONSULTANTS		16,200	12,000	13,600
FELLOWSHIPS		6,930	7,965	9,180

VENEZUELA-4500, REHABILITATION

The objectives of this project are to determine the magnitude and specific nature of the rehabilitation problem in the urban and rural areas; to develop rehabilitation plans and programs on a national scale; to train personnel at the different levels; to formulate programs and standards; and to organize physical medicine and rehabilitation services, as well as orthotic and prosthetic workshops. In the budget period it is proposed to increase both PAHO/WHO advisory services and personnel training.

TOTAL		3	3	3
CONSULTANT MONTHS	PR	3	3	3
TOTAL		12	12	12
FELLOWSHIP MONTHS	PR	12	12	12

TOTAL	PR	17,340	19,620	22,440
PERSONNEL-CONSULTANTS		8,100	9,000	10,200
FELLOWSHIPS		9,240	10,620	12,240

VENEZUELA-5000, PROGRAM PLANNING AND GENERAL ACTIVITIES

The purposes of this project are to cooperate with the Government in health planning and programming within the context of social and economic development and to assist the national health authorities in preparing and carrying out activities requiring international cooperation.

TOTAL		12	24	24
P-5 MEDICAL OFFICER .0265	PR	12	12	12
P-1 ADMINISTRATIVE OFFICER .4728	PR	-	12	12

TOTAL	PR	51,275	71,355	84,390
PERSONNEL-POSTS		47,275	66,855	79,390
DUTY TRAVEL		4,000	4,500	5,000

VENEZUELA-5100, STRENGTHENING HEALTH SERVICES

The objectives of this project are to promote the transfer of technology in the field of health; to coordinate the technical cooperation given by PAHO/WHO; to identify additional external sources of health resources and expedite their use; and to encourage compliance with recommendations made by PAHO/WHO authorities. During the budget period 1977-1980 it is proposed to formulate a technical cooperation program that takes into account socioeconomic development plans in general and health in particular.

TOTAL		12	12	12
P-4 MEDICAL OFFICER 4.4813	WR	12	12	12
TOTAL		6	6	6
CONSULTANT MONTHS	WR	6	6	6
TOTAL		35	35	35
FELLOWSHIP MONTHS	WR	35	35	35

TOTAL	WR	82,375	104,830	111,605
PERSONNEL-POSTS		27,335	44,200	47,700
PERSONNEL-CONSULTANTS		16,200	18,000	20,400
DUTY TRAVEL		3,500	3,500	3,500
SUPPLIES AND EQUIPMENT		8,390	8,155	4,305
FELLOWSHIPS		26,950	30,975	35,700

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

VENEZUELA-6000, HUMAN RESOURCES PLANNING

The main objective of this project is to bring human resources production and quality into line with the requirements of the country's health plans and programs. This will require that the quantitative and qualitative needs for human resources be determined; that plans and programs be developed to meet these needs in the shortest time span possible; that coordination among educational and service institutions be encouraged; that training center curricula be improved and their technology modernized; and that incentives be created to retain qualified personnel in the health sector.

TOTAL		12	12	12	TOTAL	PR	50,835	46,095	65,125
P-4 HEALTH MANPOWER OFFICER	PR	12	12	12	PERSONNEL-POSTS		26,315	27,785	43,905
4814					PERSONNEL-CONSULTANTS		18,900	12,000	13,600
TOTAL		7	4	4	DUTY TRAVEL		1,000	1,000	1,500
					FELLOWSHIPS		4,620	5,310	6,120
CONSULTANT MONTHS	PR	7	4	4					
TOTAL		6	6	6					
FELLOWSHIP MONTHS	PR	6	6	6					

VENEZUELA-6100, SCHOOL OF PUBLIC HEALTH

The principal objective of this project is to cooperate with the Government and University authorities in the coordinated development of the School of Public Health, thus enabling it to solve present and future problems which stand in the way of training the qualified personnel which are required under the country's health programs. Cooperation will be given in modernizing programs, revising curricula and upgrading teaching and administrative personnel.

TOTAL		1	1	1	TOTAL	WR	15,790	18,045	20,740
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
TOTAL		17	17	17	FELLOWSHIPS		13,090	15,045	17,340
FELLOWSHIP MONTHS	WR	17	17	17					

VENEZUELA-6200, MEDICAL EDUCATION

The purpose of this project is to cooperate with the Government in the improvement of medical education through the revision of educational methods and of the curricula of the medical schools, and the implementation of modern educational technology; the strengthening of the departments of preventive medicine; and the improvement of the administrative structure of medical schools to meet the needs of teaching and research.

TOTAL		2	2	2	TOTAL	PR	29,270	33,435	36,420
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		31	31	31	FELLOWSHIPS		23,870	27,435	31,620
FELLOWSHIP MONTHS	PR	31	31	31					

VENEZUELA-6300, NURSING EDUCATION

The objective of this project is to train a sufficient number and type of nursing personnel to meet the requirements of the health plans and programs. Within the budget period it is proposed to modernize university curricula; prepare programs of higher education for those who have completed the diversified course (bachillerato diversificado) that includes nursing (Ministry of Education); design continuing education programs; and encourage further training of instructors under the continuing education program by seminars, fellowships and other means.

TOTAL		2	2	2	TOTAL	WR	18,490	21,045	24,140
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		17	17	17	FELLOWSHIPS		13,090	15,045	17,340
FELLOWSHIP MONTHS	WR	17	17	17					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

VENEZUELA-6400, SANITARY ENGINEERING EDUCATION

The objective of this project is to improve the scientific background of professionals working in sanitary engineering and the environmental sciences. Short, intensive courses will be organized on new technologies in water treatment and liquid and solid wastes, and applied research programs will be encouraged. Training of teachers in the Department of Sanitary Engineering will also be promoted by means of short-term fellowships.

TOTAL		2	2	2	TOTAL	WR	7,710	8,655	5,860
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		3	3	3	FELLOWSHIPS		2,310	2,655	3,060
FELLOWSHIP MONTHS	WR	3	3	3					

VENEZUELA-6500, VETERINARY MEDICINE EDUCATION

The objective of this project is to improve veterinary medicine education by stimulating institutional development of educational centers in order to increase the number of professional veterinarians and train auxiliaries. In the period 1978-1980, PAHO/WHO cooperation will be directed towards the training of teachers by means of fellowships and seminars and the modernization of veterinary school curricula. The organization and installation of a school for veterinary auxiliaries will also be promoted.

TOTAL		2	2	2	TOTAL	WR	16,180	18,390	21,080
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		14	14	14	FELLOWSHIPS		10,780	12,390	14,280
FELLOWSHIP MONTHS	WR	14	14	14					

VENEZUELA-6600, DENTAL EDUCATION

The purpose of this project is to promote the institutional development of the country's three dental schools so they may train the human resources required for implementation of the Integrated Plan for the Development of Dentistry. It is proposed to work out techniques and procedures to cover planning for all types of dental personnel; to adopt new programs and promote existing programs for training dental auxiliaries; to improve administrative systems and procedures in the schools; and to modernize educational technology.

TOTAL		12	4	-	TOTAL	WR	48,620	20,545	6,120
P-4 DENTAL OFFICER 4.4239	WR	12	4	-	PERSONNEL-POSTS		41,000	14,735	-
TOTAL		6	6	6	DUTY TRAVEL		3,000	500	-
FELLOWSHIP MONTHS	WR	6	6	6	FELLOWSHIPS		4,620	5,310	6,120

VENEZUELA-7300, NATIONAL INSTITUTE OF HYGIENE

The purpose of this project is to reduce the incidence of infectious diseases through increased production of biologicals, support of epidemiological surveillance, stepped-up quality control of foodstuffs and medicines, encouragement of applied research, and training of personnel.

Having concluded the first stage of modernization and reorganization of the National Institute of Hygiene, it is proposed in the second stage of the project to consolidate advances already made and strengthen certain aspects of technology transfer in the fields of virology, microbiology, chemistry, pharmacology and pathology, and in the handling of test animals.

TOTAL		12	2	-	TOTAL	UNDP	53,960	7,600	-
P-4 VIROLOGIST 4.3955	UNDP	12	2	-	PERSONNEL-POSTS		41,400	7,600	-
TOTAL		16	-	-	FELLOWSHIPS		12,560	-	-
FELLOWSHIP MONTHS	UNDP	16	-	-					

FUND	1977	1978	1979
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FUND	1977	1978	1979
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	\$	\$	\$

VENEZUELA-7400, NATIONAL SYSTEM OF MAINTENANCE AND ENGINEERING OF HEALTH CARE FACILITIES

The objectives of this project are to implement the national maintenance system to effectively support the health-care services rendered by the existing physical facilities and extend the economic life of the components of these facilities; to guide the Ministry of Health in programming and applying the systems developed in the ministerial hierarchy and at the state and local levels; and to assist in the development of organizational structures and design criteria for the effective planning and programming of the future health-care establishment. The targets for the next period are the installment in 13 states of the system of maintenance as developed in the previous four-year project and refinement of this system in recognition of experience gained in its use; the development of corresponding technical manuals and bulletins to apply such systems at the central, state, and local levels of maintenance; and guidance of the integration of these into an effective national maintenance operation.

The UNDP has collaborated with PAHO/WHO in this project, which will terminate in December 1977, and it is the considered opinion of the project manager that the national counterparts have the capability for continuing implementation without any further international assistance.

TOTAL		24	-	-	TOTAL	63,100	-	-
-----		-----	-----	-----	-----	-----	-----	-----
P-5 PROJECT MANAGER	UNDP	12	-	-				
4,3858								
G-3 MESSENGER	PR	12	-	-	PR	12,100	-	-
.3903					-----	-----	-----	-----
					SUBTOTAL			
					PERSONNEL-POSTS	12,100	-	-
					SUBTOTAL	UNDP	51,000	-
					-----	-----	-----	-----
					PERSONNEL-POSTS	49,200	-	-
					DUTY TRAVEL	1,800	-	-

WEST INDIES

(Anguilla, Antigua, British Virgin Islands, Dominica, Montserrat, and St. Kitts-Nevis)

Anguilla, Antigua, British Virgin Islands, Dominica, Montserrat, and St. Kitts-Nevis, have in common the geographical features of being tropical, small in size and evergreen. The year is divided into two seasons: a dry season from January/February to May/June and a wet or rainy season from July to December. All of the islands are mountainous, except Antigua, and they have the same economic base in agriculture and tourism. There is, however, some difference in the type of agricultural products. Antigua has the least fertile soil and produces cotton, maize, pineapples and food crops. Dominica is very fertile and produces bananas, citrus, coconuts, fruits and food crops. St. Kitts produces sugar cane and cotton together with food crops. Montserrat produces citrus (limes), cotton, fruit and food crops. The British Virgin Islands produce sugar cane, bananas, coconuts and mangoes. All the countries supplement their agriculture with livestock consisting of cattle, sheep, goats, and pigs, as well as by fish and lobsters. The West Indian Oil Company operated an oil refinery in Antigua but closed down its operations in 1975. The new Government elected in January 1976 has purchased the company.

Tourism plays a major part in the economics of Antigua and the British Virgin Islands and to some extent in St. Kitts-Nevis and Montserrat. There is not much tourism in Dominica. All the countries have followed the general pattern of less-developed countries of making some effort at minor industrialization. As can be expected, all the countries show a yearly negative trade balance and a serious budgetary deficit. Aid in the form of grants and soft loans for development has been provided on a regular basis by the United Kingdom, Canada and, to a lesser extent, the United States of America.

Montserrat and the British Virgin Islands have remained Crown Colonies with the British Government retaining responsibility for internal security, defense, the civil service and external affairs. Apart from this, there is internal selfgovernment. The other territories have Associated Statehood with the United Kingdom which has responsibility only for external affairs and defense.

The pattern of government is parliamentary democracy with election to the House of Representatives on the basis of universal adult suffrage. In all the countries, the development strategy is aimed at reducing unemployment, selfsufficiency in food production, and improvement of the quality of life of the inhabitants through education and improved housing. Unfortunately, these objectives are difficult to achieve through a number of inborn constraints such as small size, scarcity of natural resources and adverse environmental factors, notably poor quantitative and qualitative water supply and lack of sanitary means of excreta and solid waste disposal.

Much has been done to stimulate economic development by such Caribbean regional bodies as the University of the West Indies, the Caribbean Development Bank and the Caribbean Community Secretariat (CARICOM). Some countries, such as the United Kingdom, Canada, the United States of America and more recently Venezuela and Colombia, have also been active in providing development, technical and financial assistance. UNDP and other UN agencies such as PAHO/WHO and FAO have been playing a part as well. One of the difficulties of the multiplicity of external aid sources is that aid is being offered without regard to the capacity of the countries to absorb it due to a serious scarcity of technical, management and organizational expertise at all levels.

The countries are too small to continue to establish individually all the different organizations necessary for economic development. It is important that common services are established. Certain recent events augur well for increased momentum towards Caribbean integration, which is likely to improve the socioeconomic conditions of the Lesser Developed Countries (LDCs): (1) the Caribbean Development Bank has increased its rate of processing loans and increased quantitative levels of loan disbursements for development projects; (2) the Bank is being actively supported by Canada, Colombia, Trinidad and Tobago, United States of America and Venezuela and certain international lending agencies. The donor countries are stressing the need for supporting the LDCs; (3) at an important meeting of the Prime Ministers of the four more developed countries of the Commonwealth Caribbean - Barbados, Guyana, Jamaica and Trinidad and Tobago - a number of important decisions were taken, including the provision of financial assistance to Jamaica to aid its economic recovery, and rationalization of the Caribbean passenger and freight air transport and joint industrial and agricultural enterprises; (4) this meeting followed a previous meeting in St. Kitts of CARICOM countries to discuss and formulate a CARICOM food plan; and (5) there has been agreement for achieving greater monetary cooperation among the CARICOM countries, including the establishment of a mutual balance-of-payments support mechanism.

The health situation may be reflected in certain statistical parameters. The levels of information are not uniform and it is preferable, although there is general similarity of problems, to present some health and socioeconomic indices for the countries separately:

Country	POP.	LE	BR	CDR	NMR	IMR	SMR 1-4	GHB	% BH	US\$ PCI	CODE:
Antigua	73,000	65.0	19.3	6.6	22.8	38.2	2.25	220	11.3	394	POP = Population
British Vir- gin Islands	10,000	68.5	22.5	6.5	4.4	0.0	0.0	34	9.5	1,730	IMR = Infant Mortality Rate
Dominica	74,000	65.0	23.1	6.2	14.0	26.9	1.3	241	7.4	296	LE = Life Expectancy
Montserrat	13,000	65.6	26.5	12.0	28.2	31.4	11.0	50	20.0	481	SMR = Specific Mortality Rate, 1-4 Age 1-4 years
St. Kitts- Nevis	48,000	65.6	23.2	9.0	28.2	41.1	NA	244	6.0	317	BR = Birth Rate/1,000 Live Births
											GHB = General Hospital Beds
											CDR = Crude Death Rate
											% BH = % of National Budget on Health
											NMR = Neonatal Mortality Rate
											PCI = Per capita Income

A characteristic demographic feature of the area as a whole is that 40-45% of the population is under 15 years of age and about 15% is under 5 years. This large group of dependents, together with the 18% over 65 years, when coupled with the low economic production of the area, has a serious adverse effect on socioeconomic development.

At the last Caribbean Health Ministers Conference in July 1976 a draft of a health policy for an unnamed country was presented and a resolution was passed recommending to each health administration that it formulate a health policy. There is clear evidence that each of the countries has an implicit policy which basically requires provision of health services to the entire population, free of charge or at the lowest possible cost; improvement of the quality of services provided; extension of coverage of services to all areas of the country; emphasis on upgrading maternal and child care and family planning services; special attention to combating gastroenteritis and malnutrition in children under two years of age; and promotion of health education so as to achieve community participation in the provision and development of health services.

Scant financial resources, shortage of trained personnel and their maldistribution seriously affect health planning and management. The resulting absence of the application of the planning concept and of sound management techniques has, up to the present time, prevented the emergence of clear-cut written health policies necessary for efficient organization and programming of health activities. A further offshoot of these constraints has been the disproportionate use of scanty resources on expensive hospital services to the detriment of adequate coverage and expansion of primary health care. It has retarded the growth of the concept of health care delivery as a single integrated and progressive system capable of providing health care whenever and wherever it is needed, and at the levels demanded by the circumstances.

The main communicable disease problems are: (1) acute infectious conditions, their early detection and treatment: this is a serious problem because of the heavy air traffic through the islands and their weak position in relation to adequate surveillance facilities; (2) *Aedes aegypti* eradication: the *Aedes aegypti* mosquito is present in all the countries and, until recently, all of the countries were conducting eradication programs. Increased cost of insecticides and equipment has driven all but Anguilla and the British Virgin Islands to abandon eradication in favor of control as the objective of their programs; (3) immunization against communicable diseases of childhood: immunizations against poliomyelitis and DPT are given in all the countries but there are no formal immunization programs. It is also interesting to note that, although measles has been making its appearance in near epidemic proportions for the past 2-3 years, measles vaccine is not administered probably because of its high cost; and (4) the socially transmitted diseases: syphilis and gonorrhea are of importance as the rates are high and may be rising. The true picture is not clear because these diseases are not notifiable in some of the countries and the small sizes of the communities make follow-up of cases difficult.

Over 60% of the population of the countries are women and children. Maternal mortality is not very high but morbidity from avitaminosis and anemia is prevalent. The tendency towards large families leads to a state of chronic ill-health in a large number of women. Moreover, a vicious circle is set up in which a high fertility rate and large families lead to poor social conditions which in turn leads to high infant mortality.

Gastroenteritis and malnutrition in children under two years of age account for high morbidity and mortality rates in this age group. It is estimated that the mortality rate in the 1-4 years age group was around three per 1,000, while the neonatal mortality rate was 19.6 and infant mortality 27.6. Many of the children who die in infancy do so from communicable diseases, including those for which vaccines are available. Efforts are being made to make immunization compulsory at or before entry into primary school.

The Caribbean Health Ministers have committed their countries to the implementation of a strategy and plan of action to combat gastroenteritis in children under two years. The plan includes maintenance of nutrition surveillance, immunization, health education and improvement of maternal and child health and family planning programs.

St. Kitts and Dominica have active maternal and child health and family planning programs which are assisted by UNFPA, and Antigua and the British Virgin Islands have indicated interest in setting up programs.

The governments are well aware that protein-calorie malnutrition is a problem, especially in young children. There has been considerable activity in all the countries aimed at establishing systems to monitor the nutritional status in the countries. Antigua and St. Kitts have proposed to conduct limited surveys, and the details are being worked out.

All the governments have shown concern for improvement of environmental health services. The health statistics show a high demand for outpatient treatment and hospitalization for diseases related to inadequate supply and poor quality of water, as well as inadequate facilities for excreta disposal. Each country has a water department with a fully trained water engineer. The institutional and management framework, however, is very poor, and there is a gross shortage of trained supervisors and water operators.

In all the countries excreta disposal is done by septic tanks in affluent urban areas and pit latrines elsewhere. Some very rural areas of some of the countries do not even have pit latrines, or else they are unsatisfactory. Each country has a program for the manufacture of slabs and risers for latrine construction supervised by a public health inspector.

Sanitary disposal of solid waste is a problem in all the countries. In each island the Public Health Department is responsible for this work. There are no sanitary engineers specialized in solid waste management, and the entire operation is in the hands of the public health inspectors. In all the countries a serious effort is made to deal with the problems, but inadequate financial and human resources and lack of equipment severely limit the possibility for really effective solid waste management.

Each country has a nursing school, and professional nurses are trained for state registration and midwifery. Nursing assistants are also trained. Postgraduate training in public health nursing, nursing administration and advanced nursing education can only be obtained overseas. In all the countries the nurses have proved to be a very dedicated body of health workers and have borne the brunt of the district health services, and of maternal and child care.

Only one major laboratory is available. This is located in Dominica, where there is provision for a qualified pathologist. In the other countries there are medical laboratories staffed by nongraduate diploma trained laboratory technicians. The pathologist post in Dominica fell vacant during 1976, causing great loss not only to Dominica but to all the Leeward Islands since these services were often made available to the smaller laboratories of the area.

All the governments have recognized the important role that health education must play in the promotion of community participation in the development of health services.

Steps are being taken to train health educators to introduce health education components into the curricula of primary and secondary schools and of teacher training institutions as well as to formulate and implement health education programs. Health education posts are being provided in the establishments.

Each country has a reasonable institutional framework on which to build an adequate system of health care delivery. Each has a general hospital, and some have long stay and special hospitals. All have a network of health centers scattered throughout the country. There is, however, very weak infrastructure.

It appears that a low priority is given to the development of good information systems because, although the persons doing health statistics have been given training at lower and intermediate levels, some of them for as long as 18 months, the grade allocated to their posts is so low that they seek and obtain transfer to more senior clerical posts in order to obtain promotion. In some countries only one person is charged with the entire responsibility for health statistics.

There is serious scarcity of trained health personnel at all levels but is less marked among physicians, nurses and public health inspectors. The greatest shortage is found in administrative and management skills. Paramedical personnel are also scarce, as can be seen from the following ratios of categories of personnel per 10,000 population: physicians, 3.1; dentists, 0.6; graduate nurses, 20.0; midwives, 3.5; auxiliary nurses, 5.0; public health inspectors, 2.0; and health educators, 0.4. Data for other categories are not reliable as personnel change very frequently, but the ratios are known to be very low indeed.

The need for extensive training in the support or paramedical field has been recognized, and was a subject of concern of the Second Meeting of the Caribbean Health Ministers in Bermuda in 1971. As a result of Resolution XX of that meeting, there are now four centers at which education in the health services is available. In addition, fellowships in a wide field of allied health disciplines are available for training outside of the Caribbean area.

WEST INDIES
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	614,848	78.2	419,397	69.0	340,955	64.6
SERVICES TO INDIVIDUALS	222,131	28.3	196,405	32.3	115,355	21.9
COMMUNICABLE DISEASES						
0700 AEDES AEGYPTI-BORNE DISEASES	42,400	5.4	44,500	7.3	46,800	8.9
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	143,251	18.2	112,425	18.5	31,855	6.0
1400 NUTRITION	31,860	4.1	34,170	5.6	36,700	7.0
1500 MENTAL HEALTH	4,620	.6	5,310	.9	-	-
ENVIRONMENTAL HEALTH SERVICES	362,232	46.0	179,757	29.6	177,580	33.6
2100 WATER SUPPLY AND EXCRETA DISPOSAL	136,082	17.3	-	-	-	-
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH PROGRAM PLANNING AND GENERAL ACTIVITIES	226,150	28.7	179,757	29.6	177,580	33.6
COMPLEMENTARY SERVICES	30,485	3.9	43,235	7.1	48,020	9.1
II. DEVELOPMENT OF THE INFRASTRUCTURE	170,935	21.8	189,135	31.0	186,210	35.4
HEALTH SYSTEMS	170,935	21.8	189,135	31.0	186,210	35.4
5100 GENERAL PUBLIC HEALTH SYSTEMS	53,120	6.8	61,665	10.1	80,410	15.3
5200 MEDICAL CARE SYSTEMS	25,240	3.2	29,325	4.8	-	-
5400 STATISTICS AND INFORMATION SYSTEMS	54,875	7.0	59,545	9.8	64,700	12.3
5500 MANAGEMENT SYSTEMS	37,700	4.8	38,600	6.3	41,100	7.8
GRAND TOTAL	785,783	100.0	608,532	100.0	527,165	100.0

*LESS THAN .05 PERCENT

WEST INDIES
 ADDITIONAL ADVISORY SERVICES AVAILABLE
 FROM AREA I CONSULTANTS*

Project No. and Fund Reference	Program Area	Post No.	Grade	1 9 7 7		1 9 7 8		1 9 7 9	
				Units (Days)	Amount US\$	Units (Days)	Amount US\$	Units (Days)	Amount US\$
AREA I (PR)	<u>Program Planning and General Activities</u>			33	19,600	33	23,480	33	24,820
	Area Representative	0.0264	D-1						
AMRO-0710 (PR)	<u>Communicable Diseases - Aedes aegypti</u>			32	4,890	32	5,705	32	6,190
	Medical Officer	0.0610	P-4						
AMRO-1310(WR/WP)	<u>Maternal and Child Health and Family Welfare</u>			264	35,145	264	40,715	264	43,575
	Medical Officer	4.3209	P-5						
	Medical Officer	4.3700	P-4						
	Health Education Specialist	4.3702	P-4						
	Nurse Midwife	4.3703	P-4						
AMRO-1410 (WR)	<u>Nutrition</u>			180	14,735	180	23,200	180	25,200
	Medical Officer	4.0885	P-4						
AMRO-2010 (PR)	<u>Environmental Health Services</u>			93	17,445	93	18,495	93	19,575
	Sanitary Engineer	0.0862	P-5						
AMRO-3110 (WR)	<u>Animal Health and Veterinary Public Health</u>			61	9,375	61	10,110	61	10,865
	Veterinarian	4.4045	P-5						
	Seminar Costs								
AMRO-4110 (PR)	<u>Nursing</u>			120	9,335	120	14,820	120	15,735
	Nurse	0.0887	P-4						
AMRO-4410 (PR)	<u>Health Education</u>			100	14,055	100	15,120	100	16,015
	Health Education Specialist	0.0918	P-4						
AMRO-5210 (WR)	<u>Medical Care Systems</u>			140	20,350	140	21,990	140	23,720
	Hospital Administrator	4.3580	P-4						
AMRO-5310 (PR)	<u>Health Systems - Planning</u>			71	9,130	71	9,785	71	10,395
	Health Planner	0.4034	P-4						
AMRO-5410 (PR)	<u>Statistics and Information Systems</u>			128	16,200	128	17,350	128	18,460
	Statistician	0.0841	P-4						
AMRO-5510 (PR)	<u>Management Systems</u>			137	22,350	137	23,940	137	25,525
	Administrative Methods Officer	0.0917	P-4						
AMRO-6210 (PR)	<u>Development of Human Resources - Medicine</u>			-	42,600	-	15,000	-	-
	Grants								
AMRO-6310 (PR)	<u>Development of Human Resources - Nursing</u>			130	14,560	130	15,645	130	16,690
	Nurse Educator	0.0604	P-3						
AMRO-6910(WT/PG)	<u>Development of Human Resources - Other</u>			342	98,027	324	75,000	324	75,000
	Medical Officer	4.4353	P-5						
	Health Education Specialist	4.4355	P-4						
	Sociologist	4.4356	P-4						
	Administrative Methods Officer	4.4357	P-4						
	Seminars and Fellowships								
	-								
	Total All Programs			1,831	347,797	1,813	330,355	1,813	331,765

*The Area Representatives and Area Advisers are budgeted under the Area Offices and AMRO projects listed above. Details of these projects are provided in the section of this book called "Detail of Area Representatives and Advisers."

This table indicates additional advisory services which are available to the countries. The consultant days and dollar amounts have been distributed to the countries in each Area based on the requests of the individual countries and the plans of the Area Representative for utilization of the resources available in the Area.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

WEST INDIES - DETAIL

WEST INDIES-0700, Aedes Aegypti ERADICATION

The Aedes aegypti mosquito is still present in all the islands of the West Indies, exposing them to the risk of yellow fever, dengue and hemorrhagic dengue. Because of increasing inter-island traffic there are always opportunities for transportation of the vector from island to island. All of the islands except St. Kitts-Nevis have eradication campaigns under way. The project was started in 1970, its goal being to eradicate Aedes aegypti from these islands and, after achieving eradication, to maintain them free of the vector.

Targets for the budget period are to continue efforts to implement a campaign in St. Kitts-Nevis and to try to complete the attack phase in the other islands. Emphasis will be given to the education of the communities concerning this problem and to obtaining their support and participation.

TOTAL	12	12	12	TOTAL	WR	42,400	44,500	46,800
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P-1 SANITARIAN	WR	12	12	12	PERSONNEL-POSTS	27,400	29,500	31,800
4.0613					DUTY TRAVEL	5,000	5,000	5,000
					SUPPLIES AND EQUIPMENT	10,000	10,000	10,000

WEST INDIES-1301, FAMILY PLANNING (ST. KITTS/NEVIS)

The purpose of the project is to assist the Government in making family planning services available to the population within the maternal and child health services. The program, in operation since 1971, is completely integrated into maternal and child health services. Ten clinic locations offer specialized family planning services, and supplies are available in each health center. There are 2,700 active acceptors in the program. PAHO/WHO has provided assistance in organization and planning, training of personnel and procurement of equipment and supplies. Plans for the future include continued strengthening of services in all clinics and the extension of special adolescent services in both islands.

TOTAL	11	-	-	TOTAL	UNFPA	40,394	15,322	-
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FELLOWSHIP MONTHS	UNFPA	11	-	-	SEMINAR COSTS	3,500	3,500	-
					SUPPLIES AND EQUIPMENT	23,425	10,472	-
					FELLOWSHIPS	8,810	-	-
					MISCELLANEOUS COSTS	4,659	1,350	-

WEST INDIES-1302, HEALTH AND POPULATION DYNAMICS (ST. VINCENT)

Concern about the health situation of mothers and children and the health and social consequences of unchecked fertility led the Government to request assistance to develop family planning services within maternal and child health services.

The program was funded by UNFPA for one year in 1974. An evaluation was carried out and an extension of assistance through 1977 granted. To date there are seven operating clinics and the number of active acceptors in the program is 1,669.

TOTAL	-	-	1	TOTAL	UNFPA	42,706	69,674	31,855
-----	-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	UNFPA	-	-	1	PERSONNEL-CONSULTANTS	-	-	2,750
					SUPPLIES AND EQUIPMENT	14,525	40,107	18,700
TOTAL		3	4	-	FELLOWSHIPS	2,350	3,767	-
-----	-----	-----	-----	-----	MISCELLANEOUS COSTS	300	1,318	475
FELLOWSHIP MONTHS	UNFPA	3	4	-	COURSE COSTS	300	200	-
					LOCAL PERSONNEL COSTS	25,231	24,282	9,930

WEST INDIES-1303, FAMILY PLANNING PROGRAM (DOMINICA)

This project is part of a comprehensive maternal and child health and family planning program. The project was funded in 1972 and became operational in August 1973. An evaluation was conducted in 1974 and funding by UNFPA extended through 1976. To date services are available in 15 comprehensive health centers and 10 supply centers. The number of active acceptors has passed 2,600.

PAHO/WHO has been instrumental in program planning development, training of all categories of health personnel and procurement of equipment and supplies. Future activities will be centered on the strengthening of services, continued training and development of community education activities.

TOTAL	11	5	-	TOTAL	UNFPA	55,906	27,429	-
-----	-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	UNFPA	11	5	-	CONTRACTUAL SERVICES	1,000	-	-
					SEMINAR COSTS	6,000	3,500	-
					SUPPLIES AND EQUIPMENT	24,010	12,289	-
					FELLOWSHIPS	8,544	4,000	-
					MISCELLANEOUS COSTS	1,602	1,430	-
					LOCAL PERSONNEL COSTS	14,750	6,210	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

WEST INDIES-1304, MATERNAL AND CHILD HEALTH (CAYMAN ISLANDS)

The objectives of the preparatory project are to complete the survey of the maternal and child health situation and the resources available for maternal and child health services in the Cayman Islands and to formulate a long-term (5-10-year) plan for the strengthening of maternal and child health services.

TOTAL	PH	4,245	-	-
GRANTS		4,245	-	-

WEST INDIES-1400, NUTRITION

The major nutritional problems in the West Indies are protein-calorie malnutrition of early childhood, related problems of infectious diseases such as gastroenteritis, and iron-deficiency anemia. Mortality from malnutrition in children under five varies from 55.9 to 592.1 per 100,000 inhabitants. Prevalence of Grades II and III malnutrition as determined from clinic records varies from 2.4 to 27.2%. Up-to-date reliable information is generally lacking. There is a weak infrastructure which also affects the nutrition structure within the Ministry of Health and the organization, execution and evaluation of well-designed nutrition programs.

The immediate objectives include continuing nutrition education training to health and allied personnel; reviewing nutrition curricula in educational institutions, including nursing and agriculture; continuing to strengthen the nutrition component in maternal and child health services; reorienting coordinated nutrition programs; reviewing and establishing standards for food service; studying and designing a feasible supplementary feeding program; and increasing nutrition information through the mass media.

TOTAL	12	12	12	TOTAL	WR	31,860	34,170	36,700
P-3 NUTRITIONIST 4.3082	WR	12	12	12	PERSONNEL-POSTS	27,400	29,500	31,800
					DUTY TRAVEL	4,200	4,400	4,600
					SUPPLIES AND EQUIPMENT	260	270	300

WEST INDIES-1500, MENTAL HEALTH

The purpose of this project is to assist the English-speaking countries of the Eastern Caribbean to improve their mental health services.

TOTAL	6	6	-	TOTAL	WR	4,620	5,310	-
FELLOWSHIP MONTHS	WR	6	6	-	FELLOWSHIPS	4,620	5,310	-

WEST INDIES-2101, WATER UTILITY MANAGEMENT, DEVELOPMENT AND TRAINING

The long-range objective of this project, which covers several islands in the Caribbean, is to develop sound, self-sustaining institutions for planning, design, construction, operation and maintenance, on an islandwide basis, of water works to supply the population with potable water to the extent recommended by the Ten-Year Health Plan for the Americas.

The immediate objective is to assist governments to strengthen their capability and improve operational capacity through the development of criteria, policies, systems, practices, and a manual of procedures in the areas of management, administrative services, economics and finance, and engineering.

The project will utilize, wherever possible, common solutions in the above-indicated work areas in order to take advantage of economies of scale.

TOTAL	6	-	-	TOTAL	UNDP	136,082	-	-
P-4 ADMIN. METHODS OFFICER 4.4351	UNDP	6	-	-	PERSONNEL-POSTS	44,400	-	-
					PERSONNEL-CONSULTANTS	72,000	-	-
					DUTY TRAVEL	3,600	-	-
TOTAL		22	-	-	GROUP TRAINING	10,000	-	-
					MISCELLANEOUS COSTS	6,082	-	-
CONSULTANT MONTHS	UNDP	22	-	-				

WEST INDIES-3101, MOBILE VETERINARY LABORATORY SERVICES

The purpose of this project is to cooperate in upgrading laboratory diagnostic services in the Associated States of Montserrat. It is proposed to assist the governments in carrying out the following tasks: activities to survey zoonotic, food-borne and parasitic animal diseases; training of laboratory technicians and inservice training of animal health assistance; preparation of a detailed long-range national animal health and veterinary public health program; and establishment of diagnostic laboratories.

FUND					FUND				
1977 1978 1979					1977 1978 1979				
-----					-----				
					\$ \$ \$				
TOTAL					TOTAL				
-----					-----				
48 48 12					226,150 179,757 177,580				
-----					-----				
P-5	PROJECT MANAGER	PG	12	12 3					
	.4787				SUBTOTAL	PG	167,000	167,000	167,000
P-4	VETERINARIAN	PG	12	12 3					
	.4788								
P-3	LABORATORY TECHNICIAN	PG	12	12 3	PERSONNEL-POSTS		160,000	160,000	160,000
	.4789				DUTY TRAVEL		7,000	7,000	7,000
P-2	LABORATORY TECHNICIAN	PG	12	12 3					
	.4790				SUBTOTAL	UNDP	59,150	12,757	10,580
					SUPPLIES AND EQUIPMENT		48,860	4,230	4,231
					MISCELLANEOUS COSTS		10,290	8,527	6,349

WEST INDIES-4100, NURSING SERVICES

The purpose of the project is to assist in the organization of the hospital and community nursing services of the Caribbean countries in accordance with the needs of each country and the objectives stated in the Ten-Year Health Plan for the Americas.

TOTAL	12	12	12	TOTAL	WR	30,485	43,235	48,020
-----	-----	-----	-----	-----	-----	-----	-----	-----
P-3 NURSE 4.3670	WR	12	12	12	PERSONNEL-POSTS	18,265	29,500	31,800
					DUTY TRAVEL	3,750	4,000	5,000
					FELLOWSHIPS	8,470	9,735	11,220
TOTAL		11	11	11				
-----		-----	-----	-----				
FELLOWSHIP MONTHS	WR	11	11	11				

WEST INDIES-5100, DEVELOPMENT OF HEALTH SERVICES (LEEWARD ISLANDS)

The purpose of the project is to improve the level of health care and to extend its coverage throughout the islands of Antigua, British Virgin Islands, Montserrat, St. Kitts/Nevis and Anguilla.

The objectives include formulation of a health program within the framework of the general socioeconomic plans or policies of the countries; carrying out of organizational and administrative reforms necessary for the improvement of the health services; and training of personnel at all levels, and especially in the areas of planning and management.

TOTAL	34	35	39	TOTAL	WR	27,310	35,310	39,780
-----	-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	WR	34	39	39	SUPPLIES AND EQUIPMENT	1,130	795	-
					FELLOWSHIPS	26,180	34,515	39,780

WEST INDIES-5101, DEVELOPMENT OF HEALTH SERVICES (WINDWARD ISLANDS)

The purpose of this project is to assist and advise the Governments of St. Lucia, St. Vincent and Dominica on the delivery of health services to their population, and to achieve the goals of the Ten-Year Health Plan for the Americas.

TOTAL	3	2	1	TOTAL	WR	25,810	26,355	40,630
-----	-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	WR	3	2	1	PERSONNEL-CONSULTANTS	8,100	6,000	3,400
TOTAL		23	23	36	SUPPLIES AND EQUIPMENT	-	-	510
-----		-----	-----	-----	FELLOWSHIPS	17,710	20,355	36,720
FELLOWSHIP MONTHS	WR	23	23	36				

WEST INDIES-5200, MEDICAL CARE AND HOSPITAL ADMINISTRATION

The less-populated countries of the English-speaking Caribbean, which are either Associated States or colonies of the United Kingdom (Cayman Islands, St. Kitts, St. Lucia, St. Vincent, Montserrat and Dominica), possess personal health care delivery systems which are in urgent need of improvement in the areas of organization, management and human resources development.

The purpose of this project is to assist these respective territories to improve their personal health care delivery services and standards of medical care through the development of modern organizational structures, management procedures and physical facilities, and the training of an adequate number of specific health care workers commensurate with each country's needs.

TOTAL	5	33	-	TOTAL	UNDP	3,902	29,325	-
-----	-----	-----	-----	-----	-----	-----	-----	-----
FELLOWSHIP MONTHS	UNDP	5	33	-	FELLOWSHIPS	3,902	29,325	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

WEST INDIES-5201, HOSPITAL ADMINISTRATION (ANTIGUA)

The 210-bed Holberton Hospital is the only acute general hospital in Antigua (1970 population: 64,000). Realizing that present hospital legislation, administrative organizational procedures and human resources are unsatisfactory and are major constraints to the development of a more efficient health care facility, the Government is desirous of initiating the required changes which will assure an improved health care delivery system at the institutional level and improved standards of patient care.

The long range objective, initiated in 1972, is to develop a modern and efficient hospital organizational structure, staffed with qualified personnel, in order to improve the delivery of institutional health care and the standards of such care. Essential to the achievement of these goals is the provision of a sound legal basis for organizational and procedural changes, the improvement of human skills in all functional areas of operation, and the introduction of modern operational policies, procedures and techniques.

TOTAL	10	-	-	TOTAL	UNDP	7,838	-	-
FELLOWSHIP MONTHS	UNDP	10	-	FELLOWSHIPS		7,838	-	-

WEST INDIES-5203, MEDICAL CARE SERVICES (CAYMAN ISLANDS)

The purpose of this project is to improve the medical care services in the Cayman Islands.

TOTAL	18	-	-	TOTAL	UNDP	13,500	-	-
FELLOWSHIP MONTHS	UNDP	18	-	FELLOWSHIPS		13,500	-	-

WEST INDIES-5400, HEALTH STATISTICS

The purpose of the project is to promote the development of health records and statistical services among the governments of the area. Priority should be given to the development of community health records systems with particular emphasis on procedures for the surveillance of communicable diseases and proper recording of immunizations and family health data. At present these goals are being approached independently, but should be carried out in coordination with one another to prevent duplication.

The potential for change in the very small islands is limited by the lack of career structures which provide possibilities for advancement in the fields for which staff are trained. In cases where this problem can be alleviated, training fellowships could provide the governments with the ability to meet their health planning and management needs.

TOTAL	12	12	12	TOTAL	PR	54,875	59,545	64,700
P-3 STATISTICIAN .3425	PR	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
				DUTY TRAVEL		4,320	4,535	4,765
				FELLOWSHIPS		16,940	19,470	22,440
TOTAL	22	22	22					
FELLOWSHIP MONTHS	PR	22	22					

WEST INDIES-5500, MANAGEMENT OF HEALTH SERVICES

The purpose of this project is to provide assistance in improving the managerial leadership and consequently the delivery of health care in the Eastern Caribbean. The main focus is on adapting and utilizing the methodologies of organizational development for the improvement of institutional health care. Within the scope of planned programs of change, training programs geared toward improving attitudes and skills in relation to identified groups and organizations will continue to be of major importance.

TOTAL	12	12	12	TOTAL	WR	37,700	38,600	41,100
P-3 ADMIN. METHODS OFFICER 4.2064	WR	12	12	PERSONNEL-POSTS		32,200	34,300	36,600
				DUTY TRAVEL		3,000	3,200	3,300
				SEMINAR COSTS		2,500	1,100	1,200

AREA REPRESENTATIVES AND ADVISERS

PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES =====	1,862,125	44.8	1,993,999	45.3	2,046,330	44.7
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	497,521	12.0	573,855	13.0	598,160	13.1
-----	-----	-----	-----	-----	-----	-----
COMMUNICABLE DISEASES						
0700 AEDES AEGYPTI-BORNE DISEASES	54,335	1.3	63,355	1.4	68,795	1.5
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	361,121	8.7	407,330	9.3	418,230	9.2
1400 NUTRITION	82,065	2.0	103,170	2.3	111,135	2.4
-----	-----	-----	-----	-----	-----	-----
ENVIRONMENTAL HEALTH SERVICES	814,864	19.6	778,444	17.7	753,865	16.4
-----	-----	-----	-----	-----	-----	-----
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	188,645	4.5	201,600	4.6	215,375	4.7
2200 SOLID WASTES	27,335	.7	44,200	1.0	47,700	1.0
2900 REGIONAL DEVELOPMENT	57,690	1.4	61,125	1.4	64,660	1.4
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	419,994	10.1	338,719	7.7	270,280	5.9
3200 FOOT-AND-MOUTH DISEASE	121,200	2.9	132,800	3.0	155,850	3.4
-----	-----	-----	-----	-----	-----	-----
COMPLEMENTARY SERVICES	549,740	13.2	641,700	14.6	694,305	15.2
-----	-----	-----	-----	-----	-----	-----
4100 NURSING	282,000	6.8	345,895	7.9	365,015	8.0
4200 LABORATORIES	51,675	1.2	54,815	1.2	57,960	1.3
4300 EPIDEMIOLOGICAL SURVEILLANCE	167,090	4.0	188,315	4.3	215,525	4.7
4400 HEALTH EDUCATION	48,975	1.2	52,675	1.2	55,805	1.2
-----	-----	-----	-----	-----	-----	-----
II. DEVELOPMENT OF THE INFRASTRUCTURE =====	1,578,872	38.0	1,632,525	37.2	1,716,705	37.6
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	1,011,580	24.3	1,130,225	25.7	1,214,605	26.6
-----	-----	-----	-----	-----	-----	-----
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	380,905	9.2	446,465	10.2	486,915	10.6
5200 MEDICAL CARE SYSTEMS	95,825	2.3	102,475	2.3	109,305	2.4
5300 PLANNING	196,905	4.7	209,135	4.8	221,860	4.9
5400 STATISTICS AND INFORMATION SYSTEMS	192,020	4.6	217,310	4.9	232,490	5.1
5500 MANAGEMENT SYSTEMS	145,925	3.5	154,840	3.5	164,035	3.6
-----	-----	-----	-----	-----	-----	-----
DEVELOPMENT OF HUMAN RESOURCES	567,292	13.7	502,300	11.5	502,100	11.0
-----	-----	-----	-----	-----	-----	-----
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	133,565	3.2	156,560	3.6	166,455	3.6
6200 MEDICINE	67,140	1.6	53,000	1.2	40,050	.9
6300 NURSING	39,765	1.0	42,740	1.0	45,595	1.0
6900 OTHER	326,822	7.9	250,000	5.7	250,000	5.5
-----	-----	-----	-----	-----	-----	-----
III. ADMINISTRATIVE DIRECTION =====	713,895	17.2	768,410	17.5	806,930	17.7
=====	=====	=====	=====	=====	=====	=====
9300 ADMINISTRATIVE SERVICES	378,700	9.1	406,560	9.3	434,315	9.5
9400 GENERAL EXPENSES	335,195	8.1	361,850	8.2	372,615	8.2
-----	-----	-----	-----	-----	-----	-----
GRAND TOTAL =====	4,154,892	100.0	4,394,934	100.0	4,569,965	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

AREA REPRESENTATIVES AND ADVISERS
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
		MONTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS				
	\$				\$		\$	\$	\$	\$	\$
1977											
PAHO---PR	2,656,100	456	864	-	2,105,335	161,770	-	-	8,950	42,600	337,445
PG	300,427	36	-	18	163,174	8,235	102	71,265	21,600	-	9,470
WHO---WR	681,165	180	72	3	607,105	57,085	-	-	15,000	1,975	-
UNDP	371,200	50	36	2	228,380	11,955	8	46,125	57,240	-	27,500
UNFPA	146,000	36	-	-	122,000	24,000	-	-	-	-	-
TOTAL	4,154,892	758	972	23	3,223,994	263,045	110	117,390	41,683	89,765	374,415
PCT. OF TOTAL	100.0				77.7	6.3		2.8	1.0	2.2	9.0
1978											
PAHO---PR	2,937,105	468	864	-	2,364,475	176,980	-	-	5,000	15,000	364,100
PG	101,954	13	-	3	89,000	7,954	-	-	-	-	5,000
WHO---WR	799,990	180	72	3	720,220	62,770	-	-	15,000	2,000	-
UNDP	382,800	60	36	9	322,840	15,300	-	10,000	-	-	34,660
UNFPA	173,085	36	12	-	143,085	30,000	-	-	-	-	-
TOTAL	4,394,934	757	984	15	3,639,620	293,004	-	10,000	20,000	13,550	403,760
PCT. OF TOTAL	100.0				82.8	6.7		.2	.5	.3	9.2
1979											
PAHO---PR	3,100,715	468	864	-	2,514,835	193,985	-	-	5,000	12,030	374,865
WHO---WR	879,190	180	72	8	790,365	69,110	-	-	17,000	2,715	-
UNDP	405,850	60	36	10	340,120	15,300	3	8,430	-	6,000	36,000
UNFPA	184,210	36	12	-	151,210	33,000	-	-	-	-	-
TOTAL	4,569,965	744	984	18	3,796,530	311,395	3	8,430	22,000	20,745	410,865
PCT. OF TOTAL	100.0				83.1	6.8		.2	.5	.4	9.0

PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION						PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP-UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS					

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

AREA REPRESENTATIVES AND ADVISERS - DETAIL

Area Representative Offices are to provide advisory services to the countries through country representatives. The general functions are to follow closely and report on the tendencies in the socioeconomic development in the countries of the area; promote inclusion of health in the development process; advise on health planning and programming; serve as liaison with sub-regional organizations of the area in which he is assigned and with international, bilateral and private organizations in the countries of the area; participate in the planning, development and coordination of intercountry programs; coordinate the utilization of intercountry advisers; and promote the objectives of PAHO through association with professional schools, institutions, and societies.

In addition, specialists are being assigned as area advisers in technical fields common to the countries in each area. These fields are identified in separate projects below.

Area I: The Bahamas, Barbados, the Departments of France in the Americas, Grenada, Guyana, Jamaica, the Netherlands Antilles, Surinam, Trinidad and Tobago, the West Indies and other territories of the United Kingdom, and Venezuela. The Area Office is located in Caracas, Venezuela

TOTAL		120	120	120	TOTAL	PR	215,575	258,260	273,005
D-1 AREA REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		154,285	182,960	194,905
.0264					DUTY TRAVEL		3,500	5,000	6,000
G-7 OFFICE MANAGER	PR	12	12	12	HOSPITALITY		450	450	450
.0863					COMMON SERVICES		57,340	69,850	71,650
G-6 SECRETARY	PR	36	36	36					
.0270 .3059 .3855									
G-5 CLERK	PR	12	12	12					
.1069									
G-4 CLERK	PR	12	12	12					
.0271									
G-3 DRIVER	PR	12	12	12					
.3479									
G-2 CLERK	PR	12	12	12					
.3212									
G-2 GUARD/JANITOR	PR	12	12	12					
.0272									

AMRO-0710, AEDES AEGYPTI ERADICATION (CARIBBEAN)

TOTAL		24	24	24	TOTAL	PR	54,335	63,355	68,795
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		48,185	55,655	58,865
.0610					DUTY TRAVEL		6,000	6,900	8,900
G-5 SECRETARY	PR	12	12	12	SUPPLIES AND EQUIPMENT		150	800	1,030
.4583									

AMRO-1310, FAMILY HEALTH AND POPULATION DYNAMICS (AREA I)

TOTAL		48	60	60	TOTAL		191,000	221,285	236,810
P-5 MEDICAL OFFICER	WR	12	12	12	SUBTOTAL	WR	45,000	48,200	52,600
4.3209									
P-4 HEALTH EDUCATION SPECIALIST	UNFPA	12	12	12	PERSONNEL-POSTS		43,000	46,200	49,700
4.3702					DUTY TRAVEL		2,000	2,000	2,900
P-4 MEDICAL OFFICER	UNFPA	12	12	12	SUBTOTAL	UNFPA	146,000	173,085	184,210
4.3700									
P-4 NURSE MIDWIFE	UNFPA	12	12	12	PERSONNEL-POSTS		122,000	143,085	151,210
4.3703					DUTY TRAVEL		24,000	30,000	33,000
G-4 SECRETARY	UNFPA	-	12	12					
4.4933									

AMRO-1410, NUTRITION ADVISORY SERVICES (AREA I)

TOTAL		12	12	12	TOTAL	WR	29,485	46,400	50,400
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		27,335	44,200	47,700
4.0885					DUTY TRAVEL		2,000	2,000	2,500
					SUPPLIES AND EQUIPMENT		150	200	200

FUND 1977 1978 1979

AMRO-2010, SANITARY ENGINEERING (AREA I)

TOTAL		24	24	24
-----		-----	-----	-----
P-5 SANITARY ENGINEER	PR	12	12	12
.0862				
G-6 SECRETARY	PR	12	12	12
.3211				

FUND 1977 1978 1979

\$ \$ \$

TOTAL	PR	68,125	72,235	76,440
-----	-----	-----	-----	-----
PERSONNEL-POSTS		61,975	65,585	69,290
DUTY TRAVEL		6,000	6,500	7,000
SUPPLIES AND EQUIPMENT		150	150	150

AMRO-3110, VETERINARY PUBLIC HEALTH (AREA I)

TOTAL		12	12	12
-----		-----	-----	-----
P-5 VETERINARIAN	WR	12	12	12
4.4045				

TOTAL	WR	54,150	58,400	62,850
-----	-----	-----	-----	-----
PERSONNEL-POSTS		41,000	44,200	47,700
DUTY TRAVEL		6,000	7,000	7,900
SEMINAR COSTS		7,000	7,000	7,000
SUPPLIES AND EQUIPMENT		150	200	250

AMRO-4110, NURSING (AREA I)

TOTAL		12	12	12
-----		-----	-----	-----
P-4 NURSE	PR	12	12	12
.0887				

TOTAL	PR	27,965	44,375	47,105
-----	-----	-----	-----	-----
PERSONNEL-POSTS		26,315	41,675	43,905
DUTY TRAVEL		1,500	2,500	3,000
SUPPLIES AND EQUIPMENT		150	200	200

AMRO-4410, HEALTH EDUCATION (CARIBBEAN)

TOTAL		12	12	12
-----		-----	-----	-----
P-4 HEALTH EDUCATION SPECIALIST	PR	12	12	12
.0918				

TOTAL	PR	48,975	52,675	55,805
-----	-----	-----	-----	-----
PERSONNEL-POSTS		39,475	41,675	43,905
DUTY TRAVEL		6,000	6,000	6,900
SUPPLIES AND EQUIPMENT		3,500	5,000	5,000

AMRO-5210, MEDICAL CARE SERVICES (AREA I)

TOTAL		12	12	12
-----		-----	-----	-----
P-4 HOSPITAL ADMINISTRATOR	WR	12	12	12
4.3580				

TOTAL	WR	52,150	56,400	60,800
-----	-----	-----	-----	-----
PERSONNEL-POSTS		46,000	49,200	52,700
DUTY TRAVEL		6,000	7,000	7,900
SUPPLIES AND EQUIPMENT		150	200	200

AMRO-5310, HEALTH PLANNING AND ORGANIZATION (AREA I)

TOTAL		12	12	12
-----		-----	-----	-----
P-4 HEALTH PLANNER	PR	12	12	12
.4034				

TOTAL	PR	45,625	48,875	52,005
-----	-----	-----	-----	-----
PERSONNEL-POSTS		39,475	41,675	43,905
DUTY TRAVEL		6,000	7,000	7,900
SUPPLIES AND EQUIPMENT		150	200	200

AMRO-5410, HEALTH STATISTICS (AREA I)

TOTAL		12	12	12
-----		-----	-----	-----
P-4 STATISTICIAN	PR	12	12	12
.0841				

TOTAL	PR	45,625	48,875	52,005
-----	-----	-----	-----	-----
PERSONNEL-POSTS		39,475	41,675	43,905
DUTY TRAVEL		6,000	7,000	7,900
SUPPLIES AND EQUIPMENT		150	200	200

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-5510, MANAGEMENT OF HEALTH SERVICES (AREA I)

TOTAL		24	24	24	TOTAL	PR	58,690	62,855	66,965
P-4 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		52,540	55,655	58,865
.0917					DUTY TRAVEL		6,000	7,000	7,900
G-5 CLERK	PR	12	12	12	SUPPLIES AND EQUIPMENT		150	200	200
.2122									

AMRO-6210, MEDICAL EDUCATION IN THE CARIBBEAN

TOTAL	PR	42,600	15,000	-
GRANTS		42,600	15,000	-

AMRO-6310, NURSING EDUCATION (AREA I)

TOTAL		12	12	12	TOTAL	PR	39,765	42,740	45,595
P-3 NURSE EDUCATOR	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.0604					DUTY TRAVEL		6,000	7,000	7,900
					SUPPLIES AND EQUIPMENT		150	200	200

AMRO-6910, EDUCATION AND TRAINING OF PARAMEDICAL PERSONNEL (CARIBBEAN)

TOTAL		74	72	72	TOTAL		326,822	250,000	250,000
P-5 PROJECT MANAGER	UNDP	12	12	12	SUBTOTAL	PG	76,822	-	-
4.4353									
P-4 ADMIN. METHODS OFFICER	UNDP	2	-	-	SEMINAR COSTS		5,557	-	-
4.4357					FELLOWSHIPS		71,265	-	-
P-4 HEALTH EDUCATION SPECIALIST	UNDP	12	12	12	SUBTOTAL	UNDP	250,000	250,000	250,000
4.4355									
P-4 SCCICLOGIST	UNDP	12	12	12	PERSONNEL-POSTS		171,220	178,200	178,200
4.4356					PERSONNEL-CONSULTANTS		7,000	34,000	40,000
G-6 ADMINISTRATIVE ASSISTANT	UNDP	12	12	12	DUTY TRAVEL		7,955	9,300	9,300
4.4547					FELLOWSHIPS		4,125	-	-
G-5 SECRETARY	UNDP	12	12	12	GROUP TRAINING		37,200	6,000	-
4.3529					MISCELLANEOUS COSTS		8,500	8,500	8,500
G-2 DRIVER	UNDP	12	12	12	LOCAL PERSONNEL COSTS		14,000	14,000	14,000
4.4548									
TOTAL		2	9	10					
CONSULTANT MONTHS	UNDP	2	9	10					
TOTAL		107	-	-					
FELLOWSHIP MONTHS	PG	102	-	-					
FELLOWSHIP MONTHS	UNDP	5	-	-					

FUND	1977	1978	1979
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	\$	\$	\$

Area II: Cuba, Dominican Republic, Haiti, and Mexico. The Area Office is located in Mexico, D.F., Mexico.

TOTAL		156	168	168	TOTAL	PR	247,505	287,990	314,470
D-1	AREA REPRESENTATIVE .0273	PR	12	12	12	PERSONNEL-POSTS	161,955	197,940	222,720
P-3	ADMINISTRATIVE OFFICER .4721	PR	-	12	12	DUTY TRAVEL	4,400	4,600	4,800
P-1	EDITOR .3453	PR	12	12	12	HOSPITALITY	450	450	450
G-8	OFFICE MANAGER .0276	PR	12	12	12	COMMON SERVICES	80,700	85,000	86,500
G-6	SECRETARY .0277	PR	12	12	12				
G-5	CLERK .0278 .0279	PR	24	24	24				
G-5	SECRETARY .0281 .3496	PR	24	24	24				
G-4	CLERK .3532	PR	12	12	12				
G-3	DRIVER .0280	PR	12	12	12				
G-2	MESSENGER .0282 .3446	PR	24	24	24				
G-1	GUARD/JANITOR .4606	PR	12	12	12				

AMRO-1320, MATERNAL AND CHILD HEALTH AND POPULATION DYNAMICS (AREA II)

TOTAL		12	12	12	TOTAL	PR	43,675	46,075	48,505
P-4 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.0027					DUTY TRAVEL		4,200	4,400	4,600

AMRO-2020, SANITARY ENGINEERING (AREA II)

TOTAL		24	24	24	TOTAL	WR	55,320	59,290	63,595
P-5	SANITARY ENGINEER	WR	12	12	12	PERSONNEL-POSTS	51,120	54,890	58,995
	4.0864					DUTY TRAVEL	4,200	4,400	4,600
G-5	SECRETARY	WR	12	12	12				
	4.0865								

AMRO-3120, VETERINARY PUBLIC HEALTH (AREA II)

<u>TOTAL</u>		<u>24</u>	<u>24</u>	<u>24</u>	<u>TOTAL</u>	<u>PR</u>	<u>51,795</u>	<u>54,765</u>	<u>57,800</u>
P-4 VETERINARIAN .3218	PR	12	12	12	PERSONNEL-POSTS DUTY TRAVEL		47,595	50,365	53,200
G-5 CLERK .3675	PR	12	12	12			4,200	4,400	4,600

AMRO-4120, NURSING (AREA II)

TOTAL			24	24	24	TOTAL	PR	40,870	57,155	60,360
P-4 NURSE .0889	PR	12	12	12	PERSONNEL-POSTS DUTY TRAVEL			36,670	52,755	55,760
G-6 ADMINISTRATIVE ASSISTANT .0890	PR	12	12	12				4,200	4,400	4,600

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

AMRO-5220, MEDICAL CARE SERVICES (AREA II)

TOTAL		12	12	12	TOTAL	PR	43,675	46,075	46,505
P-4 HOSPITAL ADMINISTRATOR	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.2188					DUTY TRAVEL		4,200	4,400	4,600

AMRO-5320, HEALTH PLANNING (AREA II)

TOTAL		12	12	12	TOTAL	WR	48,250	51,710	55,450
P-4 HEALTH PLANNER	WR	12	12	12	PERSONNEL-POSTS		43,000	46,200	49,700
4.3674					DUTY TRAVEL		5,250	5,510	5,750

AMRO-5420, HEALTH STATISTICS (AREA II)

TOTAL		24	24	24	TOTAL	WR	55,620	59,390	63,695
P-4 STATISTICIAN	WR	12	12	12	PERSONNEL-POSTS		51,120	54,890	58,995
4.0839					DUTY TRAVEL		4,500	4,500	4,700
G-5 SECRETARY	WR	12	12	12					
4.3161									

Area III: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. The Area Office is located in Guatemala City, Guatemala.

TOTAL		108	108	108	TOTAL	PR	186,470	197,350	208,745
D-1 AREA REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		124,615	132,650	141,095
.0283					DUTY TRAVEL		5,000	5,000	5,000
G-7 SECRETARY	PR	12	12	12	HOSPITALITY		450	450	450
.0287					COMMON SERVICES		56,405	59,250	62,200
G-6 SECRETARY	PR	24	24	24					
.0291 .0892									
G-5 SECRETARY	PR	24	24	24					
.2063 .2131									
G-2 DRIVER	PR	12	12	12					
.0292									
G-2 GUARD/JANITOR	PR	12	12	12					
.0293									
G-2 MESSENGER	PR	12	12	12					
.3184									

AMRO-1330, MATERNAL AND CHILD HEALTH (AREA III)

TOTAL		24	24	24	TOTAL	PR	62,845	66,095	70,415
P-5 MEDICAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		56,845	60,095	63,415
.3365					DUTY TRAVEL		5,500	5,500	6,500
G-5 SECRETARY	PR	12	12	12	SUPPLIES AND EQUIPMENT		500	500	500
.3000									

AMRO-1331, MATERNAL, CHILD AND FAMILY HEALTH IN RURAL AREAS (AREA III)

TOTAL		3	3	-	TOTAL	PG	24,056	15,000	-
CONSULTANT MONTHS	PG	3	3	-	PERSONNEL-CONSULTANTS		10,000	10,000	-
					SEMINAR COSTS		4,586	-	-
					LOCAL COSTS		9,470	5,000	-

FUND 1977 1978 1979

AMRO-2030, SANITARY ENGINEERING (AREA III)

TOTAL		36	36	36

P-4 SANITARY ENGINEER	PR	12	12	12
.0849				
P-4 SOLID WASTE ENGINEER	WR	12	12	12
4.4932				
G-6 SECRETARY	PR	12	12	12
.0867				
TOTAL		3	3	3

CONSULTANT MONTHS	WR	3	3	3

FUND 1977 1978 1979

\$ \$ \$

TOTAL		92,535	114,275	123,040

SUBTOTAL	PR	54,100	57,575	61,140

PERSONNEL-POSTS		50,600	53,575	56,640
DUTY TRAVEL		3,000	3,500	4,000
SUPPLIES AND EQUIPMENT		500	500	500
SUBTOTAL	WR	38,435	56,700	61,900

PERSONNEL-POSTS		27,335	44,200	47,700
PERSONNEL-CONSULTANTS		8,100	4,000	10,200
DUTY TRAVEL		3,000	3,500	4,000

AMRO-3130, VETERINARY PUBLIC HEALTH (AREA III)

TOTAL		24	24	24

P-4 VETERINARIAN	WR	12	12	12
4.0853				
G-6 SECRETARY	WR	12	12	12
4.0832				

TOTAL	WR	57,825	61,800	66,265

PERSONNEL-POSTS		52,125	56,100	60,435
DUTY TRAVEL		5,500	5,500	5,500
SUPPLIES AND EQUIPMENT		200	200	330

AMRO-3131, COMMUNICATION IN ANIMAL HEALTH (AREA III)

TOTAL		60	37	24

P-4 VETERINARIAN	PG	12	8	-
.4685				
P-3 HEALTH EDUCATION SPECIALIST	PG	24	5	-
.4686 .4687				
G-6 SECRETARY	PR	12	12	12
.0290				
G-5 SECRETARY	PR	12	12	12
.3571				
TOTAL		15	-	-

CONSULTANT MONTHS	PG	15	-	-

TOTAL		220,244	109,094	23,690

SUBTOTAL	PR	20,695	22,140	23,690

PERSONNEL-POSTS		20,695	22,140	23,690
SUBTOTAL	PG	199,549	86,954	-

PERSONNEL-POSTS		100,358	79,000	-
PERSONNEL-CONSULTANTS		52,816	-	-
DUTY TRAVEL		8,235	7,954	-
SUPPLIES AND EQUIPMENT		21,600	-	-
COURSE COSTS		16,540	-	-

AMRO-3230, REGIONAL LABORATORY FOR DIAGNOSIS OF VESICULAR DISEASES (AREA III)

TOTAL		12	24	24

P-5 PROJECT MANAGER	UNDP	6	12	12
4.4639				
P-4 SEROLOGIST	UNDP	6	12	12
4.4640				
TOTAL		3	-	3

FELLOWSHIP MONTHS	UNDP	3	-	3

TOTAL	UNDP	121,200	132,800	155,850

PERSONNEL-POSTS		50,160	110,640	121,920
DUTY TRAVEL		4,000	6,000	6,000
SUPPLIES AND EQUIPMENT		57,240	-	6,000
FELLOWSHIPS		2,250	-	3,430
GROUP TRAINING		2,550	4,000	5,000
MISCELLANEOUS COSTS		2,000	4,160	4,500
LOCAL PERSONNEL COSTS		3,000	8,000	9,000

AMRO-4130, NURSING (AREA III)

TOTAL		48	48	48

P-4 NURSE	PR	12	12	12
.0851				
P-3 NURSE	PR	24	24	24
.3214 .4084				
G-6 SECRETARY	PR	12	12	12
.4734				

TOTAL	PR	131,930	143,755	150,730

PERSONNEL-POSTS		117,830	124,655	131,630
DUTY TRAVEL		13,500	13,500	13,500
SEMINAR COSTS		-	5,000	5,000
SUPPLIES AND EQUIPMENT		600	600	600

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-4330, EPIDEMIOLOGY (AREA III)

TOTAL		36	36	36	TOTAL	PR	78,390	82,730	87,215
P-5 EPIDEMIOLOGIST	PR	12	12	12	PERSONNEL-POSTS		72,390	76,730	81,215
.0861					DUTY TRAVEL		5,500	5,500	5,500
G-8 CLERK	PR	12	12	12	SUPPLIES AND EQUIPMENT		500	500	500
.3050									
G-5 SECRETARY	PR	12	12	12					
.3125									

AMRO-4331, VACCINATION AND EPIDEMIOLOGICAL SURVEILLANCE IN CENTRAL AMERICA AND PANAMA

TOTAL		-	-	5	TOTAL	WR	-	-	17,000
CONSULTANT MONTHS	WR	-	-	5	PERSONNEL-CONSULTANTS		-	-	17,000

AMRO-5030, SPECIAL SEMINARS IN AREA III

TOTAL	WR	8,000	8,000	10,000
PARTICIPANTS		8,000	8,000	10,000

AMRO-5330, HEALTH PLANNING (AREA III)

TOTAL		12	12	12	TOTAL	PR	45,475	47,675	49,905
P-4 HEALTH PLANNER	PR	12	12	12	PERSONNEL-POSTS		39,475	41,675	43,905
.2031					DUTY TRAVEL		5,500	5,500	5,500
					SUPPLIES AND EQUIPMENT		500	500	500

AMRO-5430, HEALTH STATISTICS (AREA III)

TOTAL		24	24	24	TOTAL		60,335	64,485	69,255
P-4 STATISTICIAN	WR	12	12	12	SUBTOTAL	PR	13,585	14,535	15,955
4.0810					PERSONNEL-POSTS		13,585	14,535	15,555
G-7 SECRETARY	PR	12	12	12	SUBTOTAL	WR	46,750	49,950	53,700
.0289					PERSONNEL-POSTS		41,000	44,200	47,700
					DUTY TRAVEL		5,500	5,500	5,500
					SUPPLIES AND EQUIPMENT		250	250	500

AMRO-5530, MANAGEMENT OF HEALTH SERVICES (AREA III)

TOTAL		12	12	12	TOTAL	PR	39,115	41,040	42,995
P-3 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		33,615	35,540	37,495
.4800					DUTY TRAVEL		5,500	5,500	5,500

AMRO-6030, DEVELOPMENT OF HUMAN RESOURCES (AREA III)

TOTAL		12	12	12	TOTAL	PR	28,315	44,675	47,905
P-4 HEALTH MANPOWER OFFICER	PR	12	12	12	PERSONNEL-POSTS		26,315	41,675	43,905
.3627					DUTY TRAVEL		1,500	2,500	3,500
					SUPPLIES AND EQUIPMENT		500	500	500

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

Area IV: Bolivia, Colombia, Ecuador, and Peru. The Area Office is located in Lima, Peru.

TOTAL		180	180	180	TOTAL	PR	245,035	259,495	271,830
D-1 AREA REPRESENTATIVE	PR	12	12	12	PERSONNEL-POSTS		144,835	154,295	164,240
.0254					DUTY TRAVEL		9,000	9,500	10,000
G-6 CLERK	PR	12	12	12	HOSPITALITY		450	450	450
.0297					COMMON SERVICES		90,750	95,250	97,140
G-6 SECRETARY	PR	12	12	12					
.3872									
G-5 CLERK	PR	12	12	12					
.0298									
G-4 CLERK	PR	12	12	12					
.0259									
G-4 CLERK-STENOGRAPHER	PR	36	36	36					
.0300 .2097 .4049									
G-3 CLERK	PR	12	12	12					
.3185									
G-2 CLERK	PR	12	12	12					
.0302									
G-2 DRIVER	PR	24	24	24					
.0301 .3186									
G-1 GUARD/JANITOR	PR	36	36	36					
.3187 .3188 .4048									

AMRO-1440, NUTRITION ADVISORY SERVICES (AREA IV)

TOTAL		24	24	24	TOTAL	WR	52,580	56,770	60,735
P-4 MEDICAL OFFICER	WR	12	12	12	PERSONNEL-POSTS		48,180	51,810	55,775
4.0877					DUTY TRAVEL		4,400	4,960	4,960
G-4 CLERK-STENOGRAPHER	WR	12	12	12					
4.2133									

AMRO-2940, SANITARY ENGINEERING PLANNING IN THE ANDEAN REGION (AREA IV)

TOTAL		24	24	24	TOTAL	PR	57,690	61,125	64,660
P-5 SANITARY ENGINEER	PR	12	12	12	PERSONNEL-POSTS		53,455	56,465	59,535
.4266					DUTY TRAVEL		4,235	4,660	5,125
G-4 CLERK-STENOGRAPHER	PR	12	12	12					
.4267									

AMRO-3140, VETERINARY PUBLIC HEALTH (AREA IV)

TOTAL		24	24	24	TOTAL	WR	35,980	54,660	55,675
P-4 VETERINARIAN	WR	12	12	12	PERSONNEL-POSTS		34,180	51,810	55,775
4.3088					DUTY TRAVEL		1,500	2,500	3,500
G-4 CLERK-STENOGRAPHER	WR	12	12	12	SUPPLIES AND EQUIPMENT		300	350	400
4.3440									

AMRO-4140, NURSING (AREA IV)

TOTAL		24	24	24	TOTAL	PR	53,220	56,635	60,065
P-4 NURSE	PR	12	12	12	PERSONNEL-POSTS		48,820	51,675	54,605
.0893					DUTY TRAVEL		4,400	4,960	5,460
G-6 ADMINISTRATIVE ASSISTANT	PR	12	12	12					
.0894									

AMRO-4240, LABORATORY SERVICES (AREA IV)

TOTAL		12	12	12	TOTAL	PR	51,675	54,815	57,960
P-5 LABORATORY ADVISER	PR	12	12	12	PERSONNEL-POSTS		47,275	49,855	52,460
.4383					DUTY TRAVEL		4,400	4,960	5,500

FUND 1977 1978 1979

AMRO-4340, EPIDEMIOLOGY (AREA IV)

TOTAL		24	24	24
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P-5 EPIDEMIOLOGIST	PR	12	12	12
.2028				
G-4 CLERK-STENOGRAPHER	PR	12	12	12
.2161				

FUND 1977 1978 1979

\$ \$ \$

TOTAL	PR	57,855	60,865	63,935
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PERSONNEL-POSTS		53,455	56,465	59,535
DUTY TRAVEL		4,400	4,400	4,400

AMRO-6040, DEVELOPMENT OF HUMAN RESOURCES (AREA IV)

TOTAL		36	36	36
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P-5 MEDICAL EDUCATOR	PR	12	12	12
.3401				
P-4 NURSE EDUCATOR	WR	12	12	12
4.4046				
G-5 SECRETARY	PR	12	12	12
.3441				

TOTAL		105,250	111,885	118,550
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SUBTOTAL	PR	59,015	62,285	65,450
PERSONNEL-POSTS		54,780	57,885	61,050
DUTY TRAVEL		4,235	4,400	4,400
SUBTOTAL	WR	46,235	49,600	53,100
PERSONNEL-POSTS		42,000	45,200	48,700
DUTY TRAVEL		4,235	4,400	4,400

Area V: Brazil. The Area Office is located in Brasilia, Brazil and is now numbered Brazil-5000.

Area VI: Argentina, Chile, Paraguay, and Uruguay. The Area Office is located in Buenos Aires, Argentina

TOTAL		132	132	132
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D-1 AREA REPRESENTATIVE	PR	12	12	12
.0310				
P-1 ADMINISTRATIVE OFFICER	PR	12	12	12
.2098				
G-7 ADMINISTRATIVE ASSISTANT	PR	24	24	24
.0314 .0315				
G-5 CLERK	PR	24	24	24
.0315 .0321				
G-5 CLERK-STENOGRAPHER	PR	12	12	12
.0316				
G-5 SECRETARY	PR	24	24	24
.0318 .3091				
G-3 DRIVER	PR	12	12	12
.0320				
G-2 DRIVER	PR	12	12	12
.3092				

TOTAL	PR	192,215	203,780	215,795
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PERSONNEL-POSTS		135,765	144,330	153,220
DUTY TRAVEL		6,000	6,500	7,000
HOSPITALITY		450	450	450
COMMON SERVICES		50,000	52,500	55,125

AMRO-1360, MATERNAL AND CHILD HEALTH (AREA VI)

TOTAL		24	24	24
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P-5 MEDICAL OFFICER	PR	12	12	12
.2117				
G-5 SECRETARY	PR	12	12	12
.4043				

TOTAL	PR	39,545	58,875	62,500
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PERSONNEL-POSTS		37,795	56,575	59,650
DUTY TRAVEL		1,500	2,000	2,500
SUPPLIES AND EQUIPMENT		250	300	350

AMRO-4160, NURSING (AREA VI)

TOTAL		12	12	12
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P-4 NURSE	PR	12	12	12
.0895				

TOTAL	PR	28,015	43,975	46,755
-----		-----	-----	-----
PERSONNEL-POSTS		26,315	41,675	43,905
DUTY TRAVEL		1,500	2,000	2,500
SUPPLIES AND EQUIPMENT		200	300	350

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-4360, EPIDEMIOLOGY (AREA VI)

TOTAL		24	24	24	TOTAL	WR	30,845	44,720	47,375
P-4 EPIDEMIOLOGIST	WR	12	12	12	PERSONNEL-POSTS		28,945	42,420	44,390
4.0846					DUTY TRAVEL		1,500	2,000	2,500
G-5 SECRETARY	WR	12	12	12	SUPPLIES AND EQUIPMENT		400	300	485
4.1041									

AMRO-5360, HEALTH PLANNING (AREA VI)

TOTAL		24	24	24	TOTAL	PR	57,555	60,875	64,500
P-5 HEALTH PLANNER	PR	12	12	12	PERSONNEL-POSTS		53,555	56,575	59,650
.0915					DUTY TRAVEL		3,700	4,000	4,500
G-5 SECRETARY	PR	12	12	12	SUPPLIES AND EQUIPMENT		300	300	350
.0896									

AMRO-5460, HEALTH STATISTICS (AREA VI)

TOTAL		24	24	24	TOTAL	PR	30,440	44,560	47,535
P-3 STATISTICIAN	PR	12	12	12	PERSONNEL-POSTS		28,690	42,260	44,685
.4853					DUTY TRAVEL		1,500	2,000	2,500
G-5 SECRETARY	PR	12	12	12	SUPPLIES AND EQUIPMENT		250	300	350
.0871									

AMRO-5560, MANAGEMENT OF HEALTH SERVICES (AREA VI)

TOTAL		24	24	24	TOTAL	PR	48,120	50,945	54,075
P-4 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		44,120	46,645	49,225
.4590					DUTY TRAVEL		3,700	4,000	4,500
G-4 SECRETARY	PR	12	12	12	SUPPLIES AND EQUIPMENT		300	300	350
.3052									

AMRO-6260, MEDICAL EDUCATION (AREA VI)

TOTAL		12	12	12	TOTAL	WR	24,540	38,000	40,050
P-5 MEDICAL EDUCATOR	WR	12	12	12	PERSONNEL-POSTS		22,665	35,700	37,200
4.3685					DUTY TRAVEL		1,500	2,000	2,500
					SUPPLIES AND EQUIPMENT		375	300	350

INTERCOUNTRY PROJECTS

PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
1. PROGRAM OF SERVICES	17,721,832	65.1	17,043,205	64.0	17,767,722	63.3
SERVICES TO INDIVIDUALS	9,404,471	34.5	8,789,588	32.9	8,866,115	31.6
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	66,235	.2	85,800	.3	101,820	.4
0200 MALARIA	507,405	1.9	396,400	1.5	430,765	1.5
0400 TUBERCULOSIS	124,465	.5	132,995	.5	158,530	.6
0500 LEPROSY	141,878	.5	146,400	.5	158,055	.6
0600 VENEREAL DISEASES	8,900	*	9,500	*	10,350	*
0700 AEFES AEGYPTI-BORNE DISEASES	162,525	.6	172,530	.6	181,895	.6
0800 PARASITIC DISEASES	61,550	.2	66,010	.2	71,000	.3
0900 VECTOR BIOLOGY AND CONTROL	564,335	2.1	604,800	2.3	646,750	2.3
1200 OTHER COMMUNICABLE DISEASES	159,260	.6	177,500	.7	196,980	.7
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	1,561,088	5.7	1,478,622	5.5	1,584,168	5.7
1400 NUTRITION	5,274,198	19.3	4,876,438	18.3	4,738,057	16.8
1500 MENTAL HEALTH	183,760	.7	150,498	.6	165,000	.6
1600 DENTAL HEALTH	248,086	.9	208,505	.8	234,000	.8
1700 CHRONIC DISEASES	340,786	1.3	283,590	1.1	188,755	.7
ENVIRONMENTAL HEALTH SERVICES	6,436,660	23.6	6,606,017	24.8	7,241,037	25.8
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	1,084,383	4.0	1,126,025	4.2	1,198,568	4.3
2100 WATER SUPPLY AND EXCRETA DISPOSAL	625,682	2.3	469,835	1.8	520,485	1.9
2200 SOLID WASTES	-	-	-	-	-	-
ENVIRONMENTAL POLLUTION						
2300 PROGRAM PLANNING AND GENERAL ACTIVITIES	260,932	1.0	411,480	1.5	633,775	2.3
2500 RADIATION AND ISOTOPES	121,585	.4	134,445	.5	147,900	.5
2900 REGIONAL DEVELOPMENT	10,800	*	12,000	*	17,000	.1
3000 OCCUPATIONAL HEALTH	-	-	-	-	-	-
ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH						
3100 PROGRAM PLANNING AND GENERAL ACTIVITIES	356,880	1.3	212,415	.8	231,035	.8
3200 FOOT-AND-MOUTH DISEASE	2,262,322	8.3	2,351,755	8.8	2,438,435	8.6
3300 ZOOZOOSES	1,487,786	5.5	1,641,292	6.2	1,800,959	6.4
3500 QUALITY CONTROL OF FOODSTUFFS	139,155	.5	151,275	.6	161,550	.6
3600 QUALITY CONTROL OF DRUGS	75,035	.3	79,495	.3	84,530	.3
3700 PREVENTION OF ACCIDENTS	12,100	*	16,000	.1	6,800	*
COMPLEMENTARY SERVICES	1,880,701	7.0	1,647,600	6.3	1,660,570	5.9
4100 NURSING	370,950	1.4	391,580	1.5	427,000	1.5
4200 LABORATORIES	71,900	.3	78,700	.3	85,000	.3
4300 EPIDEMIOLOGICAL SURVEILLANCE	1,373,476	5.1	1,109,465	4.2	1,076,810	3.8
4500 REHABILITATION	64,375	.2	67,855	.3	71,760	.3
II. DEVELOPMENT OF THE INFRASTRUCTURE	9,442,851	34.9	9,604,980	36.0	10,248,449	36.7
HEALTH SYSTEMS	2,797,604	10.3	2,826,530	10.6	3,073,932	11.0
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	102,514	.4	103,790	.4	112,577	.4
5100 GENERAL PUBLIC HEALTH SYSTEMS	497,385	1.8	369,680	1.4	397,460	1.4
5200 MEDICAL CARE SYSTEMS	340,906	1.3	289,520	1.1	309,550	1.1
5300 PLANNING	190,835	.7	251,560	.9	306,820	1.1
5400 STATISTICS AND INFORMATION SYSTEMS	1,584,689	5.8	1,717,225	6.4	1,841,445	6.6
5500 MANAGEMENT SYSTEMS	81,275	.3	94,755	.4	106,080	.4
DEVELOPMENT OF HUMAN RESOURCES	1,810,713	6.7	1,928,170	7.2	1,947,660	7.0
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	629,340	2.3	670,810	2.5	721,060	2.6
6100 PUBLIC HEALTH	349,100	1.3	354,300	1.3	290,020	1.0
6200 MEDICINE	181,793	.7	194,200	.7	205,180	.7
6300 NURSING	222,705	.8	237,235	.9	247,395	.9
6400 ENVIRONMENTAL SCIENCES	70,375	.3	74,955	.3	79,780	.3
6500 VETERINARY MEDICINE	257,100	.9	294,670	1.1	300,225	1.1
6600 DENTISTRY	97,600	.4	99,000	.4	100,600	.4
6700 BIOSTATISTICS	2,700	*	3,000	*	3,400	*
PHYSICAL RESOURCES	143,345	.5	198,495	.7	196,570	.7
7300 PRODUCTION OF BIOLOGICALS	67,060	.2	117,730	.4	111,690	.4
7400 MAINTENANCE OF HEALTH CARE FACILITIES	76,285	.3	80,765	.3	84,880	.3
7800 FINANCIAL RESOURCES	69,875	.3	73,955	.3	78,280	.3
TECHNOLOGICAL RESOURCES	4,306,714	15.9	4,248,030	16.0	4,609,727	16.5
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES	107,595	.4	115,115	.4	128,850	.5
TEXTBOOKS AND OTHER TEACHING MATERIALS						
8100 MEDICAL TEXTBOOKS	1,687,670	6.2	1,908,555	7.2	2,133,660	7.6
8300 NURSING TEXTBOOKS	188,000	.7	235,000	.9	292,000	1.0
8400 OTHER	6,567	*	-	-	-	-
8500 REGIONAL LIBRARIES	1,130,907	4.2	792,245	3.0	815,775	2.9
8600 EDITORIAL SERVICES	1,020,410	3.8	1,075,785	4.0	1,168,410	4.2
8700 OTHER TECHNOLOGICAL RESOURCES	165,565	.6	121,330	.5	71,032	.3
8900 RESEARCH COORDINATION	314,600	1.2	329,800	1.2	342,280	1.2
GRAND TOTAL	27,164,683	100.0	26,648,185	100.0	28,016,171	100.0

*LESS THAN .05 PERCENT

INTERCOUNTRY PROJECTS

SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER	
		MCNTHS PROF.	LOCAL	CONS. MONTH		AMOUNT	MONTHS					AMOUNT
1977	\$				\$		\$	\$	\$	\$	\$	
PAHO--PR	11,790,405	2094	3037	114	9,378,965	568,935	140	97,200	288,630	529,375	135,500	791,800
PJ	903,771	48	600	2	335,004	19,511	-	-	37,720	201,375	1,727	308,434
PW	27,550	48	24	-	27,550	-	-	-	-	-	-	-
PA	374,910	228	1308	-	274,875	14,800	-	-	-	20,040	-	65,195
PN	2,307,685	144	1716	16	860,398	196,228	308	251,925	21,200	274,792	-	703,142
PG	2,766,650	121	1236	27	1,089,717	29,258	306	214,536	174,998	606,135	-	652,006
PH	3,544,746	287	551	17	832,656	69,161	82	63,149	175,385	1,848,191	94,670	461,534
PD	100,000	-	-	-	-	-	-	-	-	100,000	-	-
WHO--WR	4,292,920	744	504	82	3,086,530	316,580	297	97,100	188,390	241,735	26,000	336,585
UNDP	296,500	36	-	7	210,020	7,490	22	17,010	-	54,670	-	7,310
WD	5,862	-	-	-	-	-	-	-	5,862	-	-	-
UNFPA	753,684	72	144	12	381,614	36,000	-	-	191,420	46,500	50,900	47,250
TOTAL	27,164,683	3822	9120	277	16,477,329	1,257,963	1155	740,920	1,083,605	3,922,813	308,797	3,373,256
PCT. OF TOTAL	100.0				60.7	4.7		2.7	4.0	14.4	1.1	12.4
1978												
PAHO--PR	12,939,410	2121	3081	132	10,182,215	633,745	172	134,325	324,365	664,880	145,500	854,380
PJ	608,555	60	672	2	430,405	15,000	-	-	-	25,510	-	137,640
PW	29,350	48	24	-	29,350	-	-	-	-	-	-	-
PA	425,000	228	1308	-	310,000	20,000	-	-	-	25,000	-	70,000
PN	2,400,000	120	1680	15	906,900	200,000	275	260,000	25,000	275,000	-	733,100
PG	1,479,563	70	1232	3	947,561	11,078	-	-	9,000	153,327	-	358,597
PH	3,205,252	167	336	9	600,813	50,454	47	41,988	105,410	1,994,091	81,100	332,196
WHO--WR	4,740,930	792	504	77	3,542,325	343,235	346	99,260	182,140	217,685	19,000	337,285
UNDP	268,670	36	-	9	184,320	5,400	11	9,450	-	58,500	-	11,000
UNFPA	551,455	60	144	7	377,455	25,000	-	-	105,000	24,000	20,000	-
TOTAL	26,640,185	3702	8981	254	17,510,544	1,303,912	851	545,023	750,915	3,437,993	265,600	2,834,198
PCT. OF TOTAL	100.0				65.7	4.9		2.1	2.8	12.9	1.0	10.6
1979												
PAHO--PR	13,926,585	2124	3084	132	10,998,345	655,175	137	118,905	330,835	657,065	149,500	1,016,760
PJ	548,190	60	672	-	479,860	16,000	-	-	-	-	-	52,330
PW	31,400	48	24	-	31,400	-	-	-	-	-	-	-
PA	425,000	228	1308	-	320,000	15,000	-	-	-	20,000	-	70,000
PN	2,500,000	120	1680	15	958,600	200,000	275	275,000	25,000	295,000	-	746,400
PG	1,487,653	42	1224	-	996,715	1,500	-	-	5,500	139,994	-	343,944
PH	3,066,523	107	192	8	438,850	35,763	19	19,706	90,975	2,161,126	81,100	239,003
WHO--WR	5,183,905	828	528	85	4,068,700	366,605	345	107,350	166,100	251,505	26,000	197,645
UNDP	272,025	36	-	9	202,860	5,400	9	9,450	-	43,815	-	10,500
UNFPA	574,890	60	144	7	405,890	30,000	-	-	95,000	24,000	20,000	-
TOTAL	28,016,171	3653	8856	256	18,901,220	1,325,443	785	530,411	713,410	3,592,505	276,600	2,676,582
PCT. OF TOTAL	100.0				67.5	4.8		1.9	2.5	12.8	1.0	9.5
PAHO--PR-REGULAR BUDGET												
PW-COMMUNITY WATER SUPPLY												
PA-INCAP - REGULAR BUDGET												
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS												
PG-GRANTS AND OTHER CONTRIBUTIONS												
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION												
PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND												
PJ-GRANTS RELATED TO CAREC												
WHO--WR-REGULAR BUDGET												
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM												
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES												
WD-GRANTS AND OTHER FUNDS												

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-0202, RESEARCH IN MALARIA AND OTHER PARASITIC DISEASES

The objective of this project is to promote and coordinate all research activities concerning malaria and other parasitic diseases. PAHO/WHO has been collaborating with the Governments of Costa Rica, Cuba, Mexico and Panama in their application of serological techniques to malaria surveillance, and providing technical assistance, fellowships and some laboratory equipment and supplies. In 1976, a research project in malaria chemotherapy and immunology was initiated in Colombia as a cooperative effort of the Government, the University of New Mexico and PAHO/WHO, with financial support from AID.

This project will also coordinate existing research activities in which PAHO/WHO actively participates and will promote additional research projects with other programs where such needs arise and resources are available. The project will maintain close contacts with other research institutions and universities as to their research activities in malaria and other parasitic diseases. The following specific activities have been planned for 1977 and 1978; to study the value of non-human primates as models for the production of human plasmodia antigens (Colombia, Costa Rica and Panama); to study the tolerance and efficacy of mefloquine and other new antimalarial drugs (Brazil and Colombia); to extend epidemiological studies with relation to the susceptibility of malaria parasites to different drugs; to establish a reference center for determining the susceptibility of *P. falciparum* to antimalarial drugs, *in vitro* and *in vivo*; and to develop immunodiagnostic tests in the field (Brazil, Colombia, Costa Rica, Cuba, Mexico, and Panama).

TOTAL		12	12	12	TOTAL	199,245	78,535	88,390
P-5 MEDICAL OFFICER .4758	PR	12	12	12	SUBTOTAL	PR 76,985	78,535	88,390
TOTAL		2	-	-	PERSONNEL-POSTS	47,275	49,855	52,460
CONSULTANT MONTHS	PG	2	-	-	DUTY TRAVEL	6,000	6,500	7,000
					SUPPLIES AND EQUIPMENT	13,710	12,180	18,930
					LOCAL COSTS	10,000	10,000	10,000
					SUBTOTAL	PG 122,260	-	-
					PERSONNEL-CONSULTANTS	6,260	-	-
					SUPPLIES AND EQUIPMENT	62,100	-	-
					LOCAL COSTS	53,900	-	-

AMRO-0400, TUBERCULOSIS CONTROL

The purposes of this project are to cooperate with the countries in reorganizing tuberculosis programs and integrating these programs into the general health structure; to prepare regulations and manuals for programming, supervision and evaluation of the activities of an integrated program; and to analyze the epidemiological status, the information registry, and special research to determine present and past risk of infection, morbidity and mortality. Advisory services will also be provided on laboratory techniques for tuberculosis diagnosis; organization of laboratory services for tuberculosis program; and production, control, and quality of the BCG vaccine.

TOTAL		36	36	36	TOTAL	124,465	132,995	152,530
P-5 MEDICAL OFFICER .0039	PR	12	12	12	SUBTOTAL	PR 59,410	68,260	76,150
P-3 NURSE 4.091C	WR	12	12	12	PERSONNEL-POSTS	55,410	58,590	66,480
G-4 SECRETARY .0045	PR	12	12	12	DUTY TRAVEL	4,000	4,000	4,000
TOTAL		4	4	4	SUPPLIES AND EQUIPMENT	-	5,670	5,670
CONSULTANT MONTHS	WR	4	4	4	SUBTOTAL	WR 65,055	64,735	82,380
					PERSONNEL-POSTS	19,865	21,265	34,200
					PERSONNEL-CONSULTANTS	10,800	12,000	13,600
					DUTY TRAVEL	4,000	4,350	4,700
					SUPPLIES AND EQUIPMENT	5,670	-	-
					COURSE COSTS	24,720	27,120	25,880

AMRO-0500, LEPROSY CONTROL

The purpose of this project is to control leprosy throughout the Region, wherever the disease is a problem. Specifically, assistance will be provided to insure proper program development for control activities and to assist in the evaluation of ongoing programs.

The PAHO/WHO Center for Training and Research in Leprosy and Related Diseases in Caracas continues to provide the focus for training and research in this field, in coordination with collaborating centers in other countries. Studies of other tropical diseases will benefit by the work being done in leprosy as well as contribute to our understanding of the overall problem of leprosy and its control. Seminars and workshops will be held periodically to identify specific problems and needs in the field as well as provide a basis for making this newer knowledge and information available to all control programs through their direct participation.

TOTAL		36	36	36	TOTAL	141,878	146,400	158,055
P-5 MEDICAL OFFICER 4.0037	WR	12	12	12	SUBTOTAL	PR 67,315	82,200	88,655
P-4 MEDICAL OFFICER .1098	PR	12	12	12	PERSONNEL-POSTS	51,675	54,775	57,925
G-4 SECRETARY .3119	PR	12	12	12	DUTY TRAVEL	7,500	8,000	8,500
TOTAL		3	3	3	SEMINAR COSTS	-	11,500	11,500
CONSULTANT MONTHS	WR	3	3	3	SUPPLIES AND EQUIPMENT	6,040	6,425	6,230
					GRANTS	1,500	1,500	4,500

FUND 1977 1978 1979

SUBTOTAL

SUPPLIES AND EQUIPMENT

SUBTOTAL

PERSONNEL-POSTS

PERSONNEL-CONSULTANTS

DUTY TRAVEL

SEMINAR COSTS

FUND 1977 1978 1979
\$ \$ \$

PH 3,363 - -

3,363 - -

WR 71,200 64,200 65,400

44,000 47,200 50,700

8,100 9,000 10,200

7,600 8,000 8,500

11,500 - -

AMRO-0600, VENEREAL DISEASE AND TREPONEMATOSES

The purpose of this project is to assist the governments in reducing the morbidity and mortality caused by the group of diseases transmitted by sexual contact. Specifically by bringing to the attention of government officials the seriousness of these diseases in direct health costs, loss of productive manpower and human suffering, it is proposed to stimulate control programs where none exist and assist in the improvement of those already functioning. Seminars on the sexually-transmitted diseases at the Area level will continue to provide the minimum level of technical understanding necessary for a control program to be effective. Direct involvement in the seminars and control programs by universities is intended to promote changes in the attitude of professionals regarding these diseases and, thus, lead to better services for the patients. It is expected that the Area seminars will stimulate additional programs at the country level, thus producing a multiplying effect.

A study begun in 1976 will be continued to determine the role of cytomegalovirus and Herpes Type II virus in the congenital malformation of infants, in mental retardation, and in hepatitis or encephalitis in infected children, as well as the role of the chlamydia in producing morbidity in both males and females and the role of the Herpes Type II virus cervical cancer.

TOTAL		2	2	2	TOTAL	WR	8,900	9,500	10,350
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SEMINAR COSTS		3,500	3,500	3,550

AMRO-0700, Aedes aegypti ERADICATION

The objective of this project is to provide technical advisory services to Member Governments for the eradication of Aedes aegypti, through collaboration in the planning, execution and evaluation of eradication programs and in the establishment of effective surveillance services for the maintenance of achieved eradication.

The objectives of the project were reviewed in the light of the recommendations of the I Meeting of the PAHO Advisory Committee on Dengue, Yellow Fever and Aedes aegypti, so that an updated policy statement could be presented for the consideration of the XXV Meeting of the Directing Council.

TOTAL		48	48	48	TOTAL		162,525	172,530	181,885
P-5 MEDICAL OFFICER	WR	12	12	12	SUBTOTAL	PR	36,615	38,540	40,495
4.0811					PERSONNEL-POSTS		33,615	35,540	37,495
P-3 ENTOMOLOGIST	PR	12	12	12	DUTY TRAVEL		3,000	3,000	3,000
.0812					SUBTOTAL	WR	125,910	133,990	141,390
P-2 SANITARIAN	WR	12	12	12	PERSONNEL-POSTS		66,235	73,005	79,080
4.0612					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
G-5 SECRETARY	WR	12	12	12	DUTY TRAVEL		14,100	14,500	14,950
4.3305					SUPPLIES AND EQUIPMENT		40,175	40,485	40,560
TOTAL		2	2	2					
CONSULTANT MONTHS	WR	2	2	2					

AMRO-0800, PARASITIC DISEASES

The objective of this project is to provide technical advisory services to the Member Governments in this Region on parasitic diseases of major importance, other than malaria, such as schistosomiasis, Chagas' disease, onchocerciasis, leishmaniasis, filariasis, amoebiasis, hydatidosis, cysticercosis, hookworm disease, ascariasis, trichuriasis, toxoplasmosis, etc.

At present, only schistosomiasis, Chagas' disease, onchocerciasis, filariasis and leishmaniasis are the subjects of consistent national control campaigns. Through the project staff and short-term consultants, assistance will be provided to determine the prevalence of the above-mentioned diseases; assess their health and, if possible, socioeconomic importance; assist in the control of these diseases; test the efficacy and efficiency of control measures; and train national staff in better diagnosis, control procedures and evaluation of the results of control programs.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	-----	-----	-----		----	-----	-----	-----
							\$	\$	\$
TOTAL		12	12	12	TOTAL	WR	61,550	66,010	71,000
P-5 PARASITOLOGIST 4.4704	WR	12	12	12	PERSONNEL-POSTS		44,000	47,200	50,700
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		7,150	7,810	8,500
TOTAL		2	2	2	SUPPLIES AND EQUIPMENT		5,000	5,000	5,000
CONSULTANT MONTHS	WR	2	2	2					

AMRO-0900, TECHNICAL ADVISORY SERVICES ON VECTOR BIOLOGY AND CONTROL

This project provides technical advisory services to Member Governments on available methodologies for the control of disease vectors; their applicability, cost and expected effectiveness; necessary requirements for their safe use; and known limitations.

In collaboration with other programs of the Division of Disease Control directed towards the control of specific diseases, it will also assist Member Governments in the study of epidemiological problems, and in the planning, execution and evaluation of programs for the control of vector-borne diseases, integrating methods of source reduction and chemical and biological control of vectors with other methods such as the treatment of cases or artificial immunization, in an effort to achieve the best possible and most economical control and to prevent specific problems such as the development of vector resistance to insecticides or reluctance of the population to cooperate in the application of control activities.

In addition the program promotes the study of and disseminates information on all aspects of vector biology relevant to control; promotes and coordinates research on new control methods; assists in the training of national and international personnel in vector control; and collaborates with other PAHO/WHO programs and other interested agencies and governments in assessing, from the human and environmental points of view, the immediate and long-term hazards of the use of pesticides in health and agriculture.

		48	48	48			123,640	133,040	142,260
TOTAL		----	----	----	TOTAL	WR	-----	-----	-----
P-5 MEDICAL OFFICER 4.0114	WR	12	12	12	PERSONNEL-POSTS		112,400	120,600	129,440
P-5 SANITARY ENGINEER 4.0113	WR	12	12	12	DUTY TRAVEL		11,240	12,440	12,820
G-4 SECRETARY 4.0115 4.4815	WR	24	24	24					

AMRO-0901, RESEARCH IN INSECTICIDES, RESISTANCE AND NEW METHODS OF CONTROL

The objectives of this project are to promote and participate in the study of resistance development in order to devise ways to avoid, delay or counteract its effects; to evaluate new insecticides and new measures of biological or genetic control and coordinate similar activities carried out by national vector control to achieve the best possible control with presently available methods; and to provide a technical resource for assistance to national control programs in the study of problem areas and their possible solution.

This project will participate in the WHO network for evaluating the effectiveness and safety of new insecticides and of biological agents against disease vectors. It will maintain close cooperation with laboratories of the University of California and other research institutions in the study of the physiological mechanisms of insecticide resistance, the spectrum of cross-resistance, synergists, and other possible methods of counteracting the resistance problem.

		60	60	60			213,295	225,260	236,840
TOTAL		----	----	----	TOTAL		-----	-----	-----
P-4 SANITARIAN 4.3221	WR	12	12	12	SUBTOTAL	PR	44,795	58,515	61,165
P-3 ENTOMOLOGIST .0857	PR	12	12	12					
P-2 SANITARIAN 4.3511 4.3512	WR	24	24	24	PERSONNEL-POSTS		41,425	43,895	46,435
G-5 ADMINISTRATIVE ASSISTANT .4632	PR	12	12	12	DUTY TRAVEL		3,370	4,620	4,730
					GRANTS		-	10,000	10,000
TOTAL		1	1	1	SUBTOTAL	WR	168,500	166,745	175,675
CONSULTANT MONTHS	WR	1	1	1					
					PERSONNEL-POSTS		99,400	106,800	114,900
					PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					DUTY TRAVEL		8,000	8,000	8,000
					SUPPLIES AND EQUIPMENT		15,600	16,000	17,000
					GRANTS		10,000	-	-
					LOCAL COSTS		32,800	32,945	32,375

AMRO-0902, RESEARCH AND REFERENCE CENTER ON VECTOR BIOLOGY AND CONTROL

The objectives of this project are to carry out research on the biology, ecology, distribution, population densities, insecticide susceptibility, and epidemiological significance of the vectors and reservoirs of Chagas' disease, leishmaniasis and filariasis, and to develop effective and economical methods of control of vector-borne diseases. This project will serve as a reference center on vector biology and control and will collaborate with the School of Malariology and Environmental Health of Venezuela in providing training facilities in vector control.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	----	----	----		----	-----	-----	-----
							\$	\$	\$
TOTAL		60	60	60	TOTAL	WR	227,400	246,500	267,650
P-5 PROJECT MANAGER 4.4729	WR	12	12	12	PERSONNEL-POSTS		205,000	221,000	238,500
P-4 ECOLOGIST 4.4731	WR	12	12	12	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
P-4 PARASITOLOGIST 4.4730	WR	12	12	12	DUTY TRAVEL		10,000	12,000	14,000
P-4 VECTOR CONTRCL SPECIALIST 4.4732 4.4733	WR	24	24	24	SUPPLIES AND EQUIPMENT		7,000	7,500	8,350
TOTAL		2	2	2					
CONSULTANT MONTHS	WR	2	2	2					

AMRO-1200, VIRAL DISEASES

PAHO/WHO recognizes both the importance of yellow fever, dengue, selected arboviral encephalites, infant gastroenteritis virus, hepatitis and hemorrhagic fever as viral diseases in the Americas, and the major threat of hemorrhagic fevers to Bolivia and Argentina.

This project will coordinate international efforts to develop a reference center and promote development of vaccines and rodent control programs. It will also support the recommendations and activities of the PAHO Scientific Advisory Committee on Yellow Fever, Dengue and *Aedes aegypti*, as well as research on the important new problem of viral diarrhea in infants. A proficiency testing program among 16 national virological laboratories for arbovirus, enterovirus and hepatitis B will strengthen this network of laboratories, and the increasing use of blood products with the concomitant increase in hepatitis will be the basis for the program to strengthen hepatitis B diagnostic facilities.

TOTAL		24	24	24	TOTAL		97,960	104,690	112,710
P-5 MEDICAL OFFICER 4.0038	WR	12	12	12	SUBTOTAL	PR	15,060	16,140	17,270
G-5 SECRETARY 4.0044	PK	12	12	12					
TOTAL		4	4	4	PERSONNEL-POSTS		15,060	16,140	17,270
CONSULTANT MONTHS	WR	4	4	4	SUBTOTAL	WR	82,900	88,550	95,440
					PERSONNEL-POSTS		44,000	47,200	50,700
					PERSONNEL-CONSULTANTS		10,800	12,000	13,600
					DUTY TRAVEL		8,100	9,150	10,240
					SEMINAR COSTS		7,000	7,200	7,500
					SUPPLIES AND EQUIPMENT		3,000	3,000	3,400
					TRAINING GRANTS		10,000	10,000	10,000

AMRO-1201, BACTERIAL DISEASES

Plague, typhoid fever, meningococcal disease, and nosocomial (hospital-acquired) infections are the most important of the miscellaneous bacterial diseases covered by this project. Plague control involves informational material, consultants, and specialized supplies to endemic countries. Fellowships to the WHO Travelling Seminars on Plague are also available. The program in typhoid fever has concentrated on epidemiological studies on the pattern of transmission of urban diseases in Latin America, epidemic assistance to the Caribbean, and field trials for improved vaccines. The nosocomial infection control program is at the developmental stage.

Following the February 1976 PAHO/WHO Seminar on Meningococcal Disease, the project's support has been directed towards the development of improved epidemiological surveillance and laboratory diagnostic services. Pilot projects in teaching hospitals are being promoted with the intent of developing simplified surveillance and control systems. It is anticipated that these will rely heavily upon the hospital nurse, staff education, and the enforcement of basic sanitary techniques.

TOTAL		5	5	5	TOTAL	PR	22,000	24,000	26,000
CONSULTANT MONTHS	PR	5	5	5	PERSONNEL-CONSULTANTS		13,500	15,000	17,000
					SUPPLIES AND EQUIPMENT		5,500	6,000	6,000
					GRANTS		3,000	3,000	3,000

AMRO-1202, RICKETTSIAL DISEASES

Classic epidemic louse-borne typhus remains a problem in the high plateau areas of Bolivia, Ecuador, Guatemala and Peru, where over 4,000 cases have been reported in the last decade. Project funds will primarily support laboratory diagnostic facilities in the four aforementioned countries, emphasizing the immunofluorescent antibody and complement-fixation tests. The surveillance of louse resistance to insecticides will be continued, and further pilot trials with the attenuated Type E vaccine are planned for two countries in the Region.

	FUND	1977	1978	1979		FUND	1977	1978	1979
	----	-----	-----	-----		----	-----	-----	-----
							\$	\$	\$
TOTAL		1	1	1	TOTAL	PR	6,700	7,000	7,400
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
					GRANTS		3,000	3,000	3,000

AMRO-1203, GASTROENTERITIS

Gastroenteritis is the leading cause of morbidity and mortality of infants and children throughout Latin America and the Caribbean. Prevention and control requires the collaborative effort of the entire public health team, particularly the pediatrician, nurse, health auxiliary, epidemiologist, sanitary engineer and public health laboratory.

This project will support seminars introducing current concepts in gastroenteritis prevention and control, the development of norms of epidemiologic surveillance and operation of oral rehydration programs, and the maintenance of cholera surveillance. Assistance will also be available for the planning, implementation and evaluation of oral rehydration pilot projects. Training fellowships will provide central public health laboratories with the expertise to diagnose the newly discovered causative agents. Applied research grants will be available to promote studies in the etiology of gastroenteritis and the response of the various organisms to oral rehydration schemes.

	TOTAL		3	3	3		TOTAL		PR	16,100	17,500	20,200
	-----		-----	-----	-----		-----		-----	-----	-----	-----
CONSULTANT MONTHS	PR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200			
					SUPPLIES AND EQUIPMENT		3,000	3,500	4,000			
					GRANTS		5,000	5,000	6,000			

AMRO-1204, MYCOTIC DISEASES

Both the III and IV International Conferences on the Mycoses identified areas in which PAHO/WHO could provide technical assistance in fungal diseases. Initially, this new project will be closely coordinated with tuberculosis control and will concentrate on the systemic mycoses of public health importance, particularly those which produce pulmonary disease. The most important of these are histoplasmosis, coccidioidomycosis and blastomycosis. Priority will be given to epidemiological assistance in determining the prevalence of pulmonary mycoses, supplies necessary for field investigations of fungal disease, and fellowships to improve the laboratory diagnosis of pulmonary mycoses.

	TOTAL		1	1	1		TOTAL		WR	4,700	5,500	5,900
	-----		-----	-----	-----		-----		-----	-----	-----	-----
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400			
					SUPPLIES AND EQUIPMENT		2,000	2,500	2,500			

AMRO-1273, MYCOLOGY RESEARCH AND TRAINING

The purposes of this continuing program are to create a forum for active exchanges among scientists concerned with medical mycology in Latin America; to promote and coordinate approaches toward the investigation of the many important mycotic problems that still remain unsolved; to evaluate and standardize the techniques and reagents used in mycologic diagnosis; to meet the manpower needs of the Region for trained mycologists and laboratory personnel; and to test and evaluate new antifungal agents.

In the coming year, in addition to the foregoing activities, the program will focus on the opportunistic fungus infections and on the black and white yeasts of medical importance. The venue for these efforts will be Brasilia (Brazil), at the IV International Conference on the Mycoses, scheduled for 20-22 June 1977.

	TOTAL		3	3	3		TOTAL		PR	8,100	14,310	16,320
	-----		-----	-----	-----		-----		-----	-----	-----	-----
CONSULTANT MONTHS	PR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200			
					FELLOWSHIPS		-	5,310	6,120			
FELLOWSHIP MONTHS	PR	-	6	6								

AMRO-1275, PREVENTION OF BLINDNESS

The major preventable causes of blindness are trachoma, onchocerciasis, keratomalacia, glaucoma, cataracts and eye trauma. Prevention of Blindness was the theme of World Health Day in 1976. The International Association for the Prevention of Blindness (IAPB) has now embarked on a global fund-raising campaign, the proceeds of which will go to pilot projects demonstrating that blindness can be substantially reduced in a cost-effective fashion.

This new project will promote the prevention of blindness in the Americas through support to existing innovative programs and assistance to Member Countries which wish to develop IAPB-sponsored or independent projects. Initially, emphasis will be on documenting the seriousness and prevalence of preventable blindness. Later efforts will involve training in the diagnosis and control of trachoma and onchocerciasis.

FUND	1977	1978	1979	FUND	1977	1978	1979
-----	-----	-----	-----	-----	-----	-----	-----
					\$	\$	\$
TOTAL	1	1	1	TOTAL	3,700	4,500	8,450
-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	1	1	1	PERSONNEL-CONSULTANTS	2,700	3,000	3,400
-----	-----	-----	-----	SUPPLIES AND EQUIPMENT	1,000	1,500	2,000
				TRAINING GRANTS	-	-	3,050

AMRO-1300, FAMILY HEALTH AND POPULATION DYNAMICS

In the majority of the countries of the Americas there still prevail high rates of morbidity and mortality which affect the most vulnerable members of the population: mothers and children. The general trend in this Region is twofold: extension of coverage of services to include the rural and marginal populations as beneficiaries of the health systems; and the provision of integrated preventive services and medical care of the above-mentioned groups, within the context of family health.

PAHO/WHO assists the countries of the Region in the identification and assessment of the health problems affecting the family; in the formulation of plans and programs for the adequate provision of services; in their implementation and evaluation; in developing the needed human resources; and in the procurement and proper utilization of financial resources from various sources. Substantial contributions for the development of family health oriented programs are provided principally by UNFPA and UNICEF.

TOTAL		276	276	276	TOTAL		802,890	822,475	880,920
P-5 MEDICAL OFFICER	PR	12	12	12					
4.3367					SUBTOTAL	PR	66,575	70,055	73,580
P-5 MEDICAL OFFICER	WR	24	24	24					
4.0078 4.3696					PERSONNEL-POSTS		59,475	62,955	66,480
P-4 ADMINISTRATIVE OFFICER	WR	-	12	12	DUTY TRAVEL		7,100	7,100	7,100
4.3697					SUBTOTAL	WR	137,065	200,965	232,450
P-4 ADMINISTRATIVE OFFICER	UNFPA	12	-	-					
4.3697					PERSONNEL-POSTS		117,335	173,065	202,800
P-4 HEALTH EDUCATION SPECIALIST	WR	12	12	12	DUTY TRAVEL		19,730	27,900	29,650
4.4196					SUBTOTAL	UNFPA	599,250	551,455	574,890
P-4 STATISTICIAN	UNFPA	12	12	12					
4.4668					PERSONNEL-POSTS		344,150	349,455	374,390
P-2 ADMINISTRATIVE OFFICER	UNFPA	12	12	12	PERSONNEL-CONSULTANTS		28,750	28,000	31,500
4.4669					DUTY TRAVEL		36,000	25,000	30,000
P-2 FINANCE OFFICER	UNFPA	12	12	12	SEMINAR COSTS		90,600	60,000	50,000
4.3805					SUPPLIES AND EQUIPMENT		46,500	24,000	24,000
P-1 EVALUATION OFFICER	UNFPA	12	12	12	GRANTS		38,000	20,000	20,000
4.4653					MISCELLANEOUS COSTS		15,250	-	-
P-1 PROCUREMENT OFFICER	UNFPA	12	12	12	COURSE COSTS		-	45,000	45,000
4.4198									
G-6 CLERK	UNFPA	24	24	24					
4.3370 4.3807									
G-6 SECRETARY	UNFPA	24	24	24					
4.3649 4.3808									
G-5 CLERK	UNFPA	48	48	48					
4.3019 4.3714 4.3806 4.3809									
G-4 CLERK	UNFPA	12	12	12					
4.3710									
G-4 CLERK-TYPIST	UNFPA	12	12	12					
4.3888									
G-4 SECRETARY	PR	12	12	12					
4.0086									
G-4 SECRETARY	UNFPA	24	24	24					
4.3368 4.4155									
TOTAL		9	7	7					
CONSULTANT MONTHS	UNFPA	9	7	7					

AMRO-1312, CONTINUING EDUCATION IN ADMINISTRATION OF FAMILY PLANNING PROGRAMS

This program aims at increasing the effectiveness and efficiency of the administration of family planning programs in the Region so that coverage and quality of services can be expanded. An additional objective is to improve the capacity of selected regional institutions to integrate such training into regular teaching programs.

As a means of analyzing the administration of family planning programs, a diagnostic instrument was prepared and field-tested during 1975 in the English-speaking Caribbean. The information obtained was used to develop the contents of a seminar on management of family planning programs held in Jamaica under joint PAHO/University of West Indies sponsorship. A course in administration of family planning programs was conducted in Mexico in cooperation with the School of Public Health.

In 1977, several short sub-regional management courses are scheduled for the Caribbean and Central America. A six-week regional course will be conducted in Mexico, as well as two seminars in Central America.

TOTAL	3	-	-	TOTAL	UNFPA 154,434	-	-
-----	-----	-----	-----	-----	-----	-----	-----
CONSULTANT MONTHS	UNFPA	3	-	-	PERSONNEL-CONSULTANTS	8,714	-
-----	-----	-----	-----	GRANTS	12,900	-	-
				COURSE COSTS	100,820	-	-
				LOCAL PERSONNEL COSTS	32,000	-	-

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-1370, LATIN AMERICAN CENTER FOR PERINATOLOGY AND HUMAN DEVELOPMENT

The specific objectives of this project are to train health professionals in the perinatal area; to undertake research on specific problems; and to disseminate updated knowledge, especially that which has a proven health impact.

For the purpose of training instructors, the Centro Latinoamericano de Perinatología y Desarrollo Humano (CLAP) conducts two regional seminars each year, the purpose of which is to promote the standardization of perinatal care and the establishment of perinatal clinical histories for the collection of appropriate statistics. CLAP will continue to offer its traditional theoretical and practical courses and will foster other courses dealing with more specific subjects in the different areas of the Region. In the research area, it will continue its multinational collaborative projects on problems of interest to Latin America. In the three-year period 1977-1979 it will undertake three programs: delaying of premature delivery, effect of maternal nutritional anemia on pregnancy and delivery, and effect of high altitude (La Paz) on pregnancy, delivery and the newborn. The last two projects will be carried out in collaboration with Paraguay and Bolivia respectively. In the information area, CLAP has already begun to update material on placental interchange; to produce audio-visual aids on the Mother and Child Accommodation and on the Placenta; and to prepare programmed instruction textbooks such as Acid-Base Equilibrium and Its Regulation in Mothers and Fetuses; all these will be published in 1977 and other selected topics will be continued in the three-year period 1978-1980. In addition, CLAP will participate in various scientific meetings and will provide advisory services for the establishment of perinatal medical centers in the countries of the Region.

TOTAL		4E	48	48	TOTAL	330,109	351,570	368,860
P-5 DIRECTOR	PR	12	12	12				
.3521					SUBTOTAL	PR	187,180	200,000
P-4 PERINATOLOGIST	PR	24	24	24				315,760
.3501 .4318								
P-4 PERINATOLOGIST	WR	12	12	12	PERSONNEL-POSTS	126,225	133,205	140,270
.43054					DUTY TRAVEL	15,500	17,400	18,600
					SUPPLIES AND EQUIPMENT	32,000	34,000	35,000
					LOCAL PERSONNEL COSTS	-	-	108,815
					COMMON SERVICES	13,455	15,395	17,075
					SUBTOTAL	PH	9,474	-
					CONTRACTUAL SERVICES	3,600	-	-
					LOCAL COSTS	5,874	-	-
					SUBTOTAL	WR	133,455	151,570
								49,100
					PERSONNEL-POSTS	25,335	41,200	44,700
					DUTY TRAVEL	4,400	4,400	4,400
					LOCAL PERSONNEL COSTS	103,720	105,970	-

AMRO-1373, MATERNAL AND CHILD HEALTH DEVELOPMENT

This program is based on results and recommendations of large epidemiologic studies, mainly the two inter-American investigations of mortality: in adults and children. Its objectives are the planning and conduct of extensive community programs of integrated action between universities and health agencies for development of service methodology and human resources in maternal and child health.

During the budget period, plans call for continued follow-up of Brazilian projects in Belém, Fortaleza, Recife, Porto Nacional, Goiânia, Campos, Niterói, São André, Embú, and Londrina; continued planning of specific studies on human reproduction, distribution of birthweights, maternal nutrition, and educational methods in maternal and child health, either under way or being planned in Recife, Campos, Rio de Janeiro and São Paulo; planning of new projects in Colombia, Mexico, Central America and, probably, Ecuador; planning and follow-up conference in 1977 for the Brazilian and international programs; and publication of consolidated reports related to Brazil.

TOTAL		12	12	12	TOTAL	178,515	187,077	210,718
P-5 MEDICAL OFFICER	PR	12	12	12				
.4305					SUBTOTAL	PR	53,565	56,470
								55,210
TOTAL		10	9	9				
					PERSONNEL-POSTS	47,275	49,855	52,460
FELLOWSHIP MONTHS	PH	10	9	9	DUTY TRAVEL	6,290	6,615	6,750
					SUBTOTAL	PH	124,950	130,607
								151,508
					CONTRACTUAL SERVICES	12,495	13,061	15,151
					SEMINAR COSTS	12,495	13,060	15,151
					SUPPLIES AND EQUIPMENT	6,247	6,530	7,576
					FELLOWSHIPS	7,497	7,836	9,030
					LOCAL PERSONNEL COSTS	47,481	49,632	51,573
					COMMON SERVICES	38,735	40,488	47,027

AMRO-1376, NURSING MIDWIFERY

The purpose of this project is to cooperate with the countries in planning, programming, developing and evaluating the nursing-midwifery component of personnel training and family health services programs within each country's health system in order to improve maternal, child and family health care by extending corresponding services to the rural and marginal populations. Its objectives are to analyze the activities involved in nursing midwifery and to evaluate the need for providing training and continuing education for its personnel. This will be done by participating in the integration of these aspects into basic training programs for nursing and obstetrics personnel on different levels and, at the same time, establishing criteria for the most efficient use of existing human resources. Cooperation will be provided in the design of regulations and guides for nursing and obstetrics to be used in neonatal, obstetric and pediatric services in hospitals, as well as for outside consultation in maternal and child health and family planning. Assistance will be provided for the development of programs for the education, training and supervision of empirical midwives and their incorporation into local maternal and child health services in order to control and improve health care for births occurring at home and for family assistance.

FUND				FUND			
1977 1978 1979				1977 1978 1979			
-----				-----			

	FUND	1977	1978	1979		FUND	1977	1978	1979
							\$	\$	\$
TOTAL		12	-	-	TOTAL	PG	44,500	-	-
P-4 NUTRITIONIST	PG	12	-	-	PERSONNEL-POSTS		44,000	-	-
.4580					DUTY TRAVEL		500	-	-

AMRO-1411, CARIBBEAN FOOD AND NUTRITION INSTITUTE

The work of CFNI is based very largely on the following specific program objectives: the promotion of the development of national food and nutrition policies in the countries of the Caribbean region; the diagnosis of the food and nutrition situation in each country of the region; strengthening the technical nutrition units of the Member Countries and enhancing their food planning capability; training personnel in nutrition and nutrition-related services; improvement of programs for the diagnosis, prevention and treatment of nutritional disorders; improvement of institutional food services; and increasing knowledge in the field of food and nutrition through relevant operational research and through the publication and distribution of nutrition literature.

The Institute collaborates with other PAHO/WHO projects, such as maternal and child health and in the training of allied health personnel. Closer coordination within the field of family health is anticipated.

TOTAL		318	314	306	TOTAL	600,501	522,378	543,066
P-5 DIRECTOR	PR	12	12	12				
.0967					SUBTOTAL	PR	266,430	296,645
P-4 ECONOMIST	PG	12	2	-				310,135
.4317					PERSONNEL-POSTS		206,880	235,555
P-4 MEDICAL OFFICER	PR	12	12	12	DUTY TRAVEL		18,000	18,000
.3652					HOSPITALITY		250	250
P-4 NUTRITION EDUCATOR	PG	6	12	6	COMMON SERVICES		41,300	42,840
.4511					SUBTOTAL	PG	280,256	168,458
P-4 NUTRITIONIST	PR	12	12	12				171,901
.2044					PERSONNEL-POSTS		157,241	151,247
P-3 NUTRITIONIST	WR	12	12	12	PERSONNEL-CONSULTANTS		39,291	-
.43103					DUTY TRAVEL		3,198	1,000
P-3 SYSTEMS ANALYST	PR	12	12	12	SEMINAR COSTS		19,907	5,000
.3491					SUPPLIES AND EQUIPMENT		852	-
P-2 EDITOR	PR	12	12	12	FELLOWSHIPS		35,100	-
.4222					COURSE COSTS		14,978	-
G-7 ADMINISTRATIVE ASSISTANT	WR	12	12	12	COMMON SERVICES		9,689	11,211
.43068					SUBTOTAL	WR	53,815	57,275
G-5 ADMINISTRATIVE ASSISTANT	PG	24	24	24				61,030
.3506 .4064					PERSONNEL-POSTS		49,815	53,275
G-4 CLERK	PG	12	12	12	DUTY TRAVEL		4,000	4,000
.4491								
G-4 SECRETARY	PR	12	12	12				
.3562								
G-4 SECRETARY	PG	36	36	36				
.3507 .4065 .4512								
G-3 CLERK	PR	24	24	24				
.3706 .4436								
G-3 CLERK	PG	24	24	24				
.4059 .4060								
G-3 SECRETARY	PR	12	12	12				
.4466								
G-3 SECRETARY	PG	24	24	24				
.4125 .4126								
G-2 CLERK	PG	12	12	12				
.4062								
G-2 DRIVER	PG	12	12	12				
.4061								
G-1 DRIVER	PG	12	12	12				
.4066								
G-1 MESSENGER	PG	12	12	12				
.4063								
TOTAL		11	-	-				
CONSULTANT MONTHS	PG	11	-	-				
TOTAL		50	-	-				
FELLOWSHIP MONTHS	PG	50	-	-				

AMRO-1430, INSTITUTE OF NUTRITION OF CENTRAL AMERICA AND PANAMA

Protein-calorie malnutrition, vitamin A deficiency, nutritional anemias, especially those due to deficiencies in iron and folates, and endemic goiter are still the most outstanding nutritional problems, defined in accordance with their nature and size, that exist in Central America and in the other countries of the Americas.

Therefore, the main goal of all of the INCAP programs is to help the governments solve these problems through its activities in research, training, advisory services and technical assistance. Provision of services to the countries is the primary objective of the Institute since they are the means for the development and support of national food and nutrition programs. One of the plans, now underway, is the operation in the countries of specific projects established jointly by the governments and INCAP. These projects are integrated into the national food and nutrition plans as they are formulated in accordance with the technical capacity and the resources that INCAP can offer.

FUND				FUND				
1977 1978 1979				1977 1978 1979				
				\$ \$ \$				
TOTAL		4224	3828	3624	TOTAL	4,375,882	4,150,265	3,963,961
P-6 DIRECTOR .0615	PR	12	12	12	SUBTOTAL	PR 633,960	670,090	703,700
P-5 MEDICAL OFFICER .0616 .0585 .1004	PR	36	36	36	PERSONNEL-POSTS	448,020	472,965	498,220
P-4 ADMINISTRATIVE OFFICER .0921	PR	12	12	12	DUTY TRAVEL	9,000	24,470	25,000
P-4 MEDICAL OFFICER .3190	PR	12	12	12	SEMINAR COSTS	5,000	5,000	5,000
P-4 NUTRITION ADVISER .0617 .0618	PR	24	24	24	HOSPITALITY	500	500	500
P-4 PROGRAMMER ANALYST .3497	PR	12	12	12	SUPPLIES AND EQUIPMENT	5,500	32,700	32,100
P-2 EDITOR-TRANSLATOR .0619	PR	12	12	12	LOCAL PERSONNEL COSTS	165,940	134,455	142,880
P-2 FINANCE OFFICER .2052	PR	12	12	12	SUBTOTAL	PA 374,910	425,000	425,000
P- PROFESSIONALS (INCAP)	PA	228	228	228	PERSONNEL-POSTS	274,875	310,000	320,000
P- PROFESSIONALS (INCAP)	PH	240	120	60	DUTY TRAVEL	14,800	20,000	15,000
P- PROFESSIONALS (INCAP)	PN	144	120	120	CONTRACTUAL SERVICES	9,800	10,000	10,000
G- LCCALS (INCAP)	PA	1308	1308	1308	SUPPLIES AND EQUIPMENT	20,040	25,000	20,000
G- LCCALS (INCAP)	PH	456	240	96	COMMON SERVICES	55,395	60,000	60,000
G- LOCALS (INCAP)	PN	1716	1680	1680	SUBTOTAL	PH 979,227	575,075	251,261
TOTAL		20	23	23	PERSONNEL-POSTS	558,159	327,793	143,218
CONSULTANT MONTHS	PN	16	15	15	DUTY TRAVEL	48,961	28,754	12,563
CONSULTANT MONTHS	WR	4	8	8	CONTRACTUAL SERVICES	97,922	57,508	25,126
TOTAL		643	624	612	SUPPLIES AND EQUIPMENT	146,884	86,261	37,689
FELLOWSHIP MONTHS	PH	38	19	7	FELLOWSHIPS	29,377	17,252	7,539
FELLOWSHIP MONTHS	PN	308	275	275	COMMON SERVICES	97,924	57,507	25,126
FELLOWSHIP MONTHS	WR	297	330	330	SUBTOTAL	PN 2,307,685	2,400,000	2,500,000
					PERSONNEL-POSTS	813,148	861,900	913,600
					PERSONNEL-CONSULTANTS	47,250	45,000	45,000
					DUTY TRAVEL	196,228	200,000	200,000
					CONTRACTUAL SERVICES	343,114	350,000	350,000
					SEMINAR COSTS	21,200	25,000	25,000
					SUPPLIES AND EQUIPMENT	274,792	275,000	295,000
					FELLOWSHIPS	251,925	260,000	275,000
					COMMON SERVICES	360,028	383,100	396,400
					SUBTOTAL	WR 80,100	80,100	84,000
					PERSONNEL-CONSULTANTS	12,000	24,000	24,000
					FELLOWSHIPS	68,100	56,100	60,000

AMRO-1472, NUTRITION TRAINING

Nutritional diseases continue to be among the most serious health problems in Latin America. At the same time there continues to be a shortage of human resources specialized in nutrition both at the professional and intermediate levels, while the training in nutrition of other health personnel remains scanty. To try to overcome this deficiency, there are now 32 universities in Latin America which have developed programs to train professionals specializing in nutrition and dietetics, and 10 universities with graduate programs in nutrition for physicians and nutritionists/dietitians. Several countries have initiated programs for the training of intermediate-level personnel, and an increasing number of schools of medicine with graduate programs in public health and schools of nursing are integrating nutrition into their curricula. Further improvement in the number of training programs and in the quality of training is handicapped by the lack of adequate resources, such as teaching personnel (both in training and number), teaching material, and practice sites.

Through this project it is hoped to improve the quantity and quality of human resources in nutrition by assisting with the development of guidelines to orient the training programs in nutrition; strengthening selected food and nutrition services to provide practical experience to students; encouraging the development of programs of continuing education; promoting the assignment of fellowships to faculty members of schools of nutrition and dietetics; assessing with directors of schools of nutrition and dietetics the progress made in the nutritionist/dietitian profession since the Caracas Conference in 1966, in order to make recommendations for the future; assisting with the review of nutrition curricula in schools of medicine and graduate programs of public health; and carrying out national and regional workshops on the integration of nutrition in the curricula of schools of medicine and of graduate schools of public health.

TOTAL		24	24	24	TOTAL	PR 69,035	73,415	88,975
P-4 NUTRITIONIST .0886	PR	12	12	12	PERSONNEL-POSTS	54,535	57,815	61,175
G-5 CLERK .4050	PR	12	12	12	PERSONNEL-CONSULTANTS	5,400	6,000	6,800
TOTAL		2	2	2	DUTY TRAVEL	3,000	3,100	3,500
CONSULTANT MONTHS	PR	2	2	2	SEMINAR COSTS	5,000	5,500	16,000
					SUPPLIES AND EQUIPMENT	1,100	1,000	1,500

AMRO-1474, NUTRITION RESEARCH

The development of sound applied nutrition research programs depends upon adequate knowledge of the factors underlining nutritional diseases and the relative benefits of specific interventions under field conditions. Many of the countries in the Region have nutrition research groups in operation. Nevertheless, there is an increasing need to reinforce these efforts and to effect collaboration among them so as to move more rapidly from basic research to applied programs on a regional level. The experience

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gained by PAHO/WHO in collaborative research programs, such as endemic goiter and iron deficiency anemia, is an example of methods for improving basic and operational research. Still another important area requiring international leadership is the standardization of methodologies for study at the community level of prevalent nutrition problems. Since many private foundations and other international agencies are interested in and concerned about nutrition as it relates to health and optimal human development, the identification of these resources and their channeling into the specific problems of the Region is an area where PAHO/WHO can beneficially apply its experience and expertise.

Thus the strategy for improving the nutrition of the population of the Americas during the present decade must include relevant research, not only to define more clearly the extent, magnitude and significance of malnutrition, but, more importantly, to utilize research findings to devise the most effective measures for the prevention, treatment and rehabilitation of deficiency diseases.

The purpose of this project is to assist research workers and institutions of the Region in the design and conduct of comprehensive studies on food and nutrition problems, ranging from biochemical and metabolic research through sociological and behavioral studies at the community level. Ultimately, special emphasis must be given to operational research related to nutrition intervention that is practical and feasible to implement.

TOTAL		24	24	12	TOTAL		69,845	19,600	14,020
-----		-----	-----	-----	-----		-----	-----	-----
P-5 NUTRITIONIST	PR	12	12	-					
.4783									
G-4 SECRETARY	PR	12	12	12	SUBTOTAL	PR	15,255	19,600	14,020
.0083					-----	-----	-----	-----	-----
					PERSONNEL-POSTS		8,135	13,100	14,020
					DUTY TRAVEL		6,120	5,500	-
					SUPPLIES AND EQUIPMENT		1,000	1,000	-
					SUBTOTAL	PG	54,590	-	-
					-----	-----	-----	-----	-----
					SEMINAR COSTS		54,590	-	-

AMRO-1479, IODINE DETERMINATION IN ENDEMIC GOITER

A major nutritional problem affecting a large percentage of the Andean population is endemic goiter and cretinism; it is found, to a lesser extent, in other parts of the Region. In recent years, nutrition research has demonstrated the practicality of injecting iodized oil for preventing iodine deficiency and cretinism in mothers and young children where the benefit of salt iodization faces logistic problems. Special efforts now need to be made to evaluate the impact of these programs on a national basis and to determine the most appropriate age for administering prophylactic doses of iodized oil. On the other hand, it is crucial to assist those countries in strengthening their salt iodization programs, in relation to both effective nationwide coverage and monitoring its implementation.

The purpose of this project is to assist the governments of Member Countries where endemic goiter is still a public health problem to establish effective national salt iodization programs and to set up iodized oil projects in areas of high prevalence of endemic goiter associated with cretinism. In the development of these applied nutrition programs, research will also be conducted on feasible ways to implement salt iodization schemes at the national level and on the most appropriate time for administering the iodized oil to populations at risk.

TOTAL		1	1	-	TOTAL	WR	2,700	3,000	-
-----		-----	-----	-----	-----		-----	-----	-----
CONSULTANT MONTHS	WR	1	1	-	PERSONNEL-CONSULTANTS		2,700	3,000	-

AMRO-1500, MENTAL HEALTH

In the Region, mental health problems of the family are increasing and most seriously affect economically weak family groups, especially those living in rural areas and in the poor neighborhoods of the big cities. Of particular importance are psychological problems affecting abandoned children, adolescents and mothers of large families. Most of the countries have national mental health offices that have designed mental health care plans, but up to the present time, these plans include only hospitalization in psychiatric institutions and external consultation with limited coverage. No mental health plans have been developed that include the family as a unit and that consider aspects for the prevention of mental illness.

This project offers technical support to national mental health programs, by promoting the development of activities aimed at a balance of psychological aspects in the functioning of the family. Assistance is also offered for the modernization of systems of psychiatric care and rehabilitation.

TOTAL		24	24	24	TOTAL		69,425	77,605	89,130
-----		-----	-----	-----	-----		-----	-----	-----
P-5 MEDICAL OFFICER	PR	12	12	12					
.0077									
G-3 SECRETARY	WR	12	12	12	SUBTOTAL	PR	56,725	65,855	76,560
.40084					-----	-----	-----	-----	-----
					PERSONNEL-POSTS		47,275	49,855	52,460
					PERSONNEL-CONSULTANTS		-	6,000	13,600
					DUTY TRAVEL		8,250	8,500	8,700
					SUPPLIES AND EQUIPMENT		1,200	1,500	1,800
					SUBTOTAL	WR	12,700	11,750	12,570
					-----	-----	-----	-----	-----
TOTAL		2	2	4	PERSONNEL-POSTS		7,300	11,750	12,570
-----		-----	-----	-----	PERSONNEL-CONSULTANTS		5,400	-	-
CONSULTANT MONTHS	PR	-	2	4					
CONSULTANT MONTHS	WR	2	-	-					

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AMRO-1575, ALCOHOL AND DRUG ABUSE

Drug and alcohol abuse are growing at an alarming rate and have widespread economic, social and health consequences for the family, the individual and society.

It is estimated that the extent and distribution of alcohol and other drug abuse in the Region are continuing to grow at an alarming rate. Youth is known to be a group which is greatly affected. However, very few governments have developed programs for combatting these problems. This project follows up the previous epidemiological research carried out by the Organization with action directed at the control of alcohol and other drug abuse. Provision is made for technical assistance to governments to design workable prevention, education and treatment programs within the context of their existing family health and mental health programs.

TOTAL		-	18	24	TOTAL		-	45,815	72,470
P-4 SOCIOLOGIST	PR	-	5	-	SUBTOTAL	PR	-	45,815	-
.3983									
P-4 SOCIOLOGIST	WR	-	-	12	PERSONNEL-POSTS		-	45,815	-
.3983					SUBTOTAL	WR	-	-	72,470
G-5 SECRETARY	PR	-	9	-			-	-	67,970
.3985					DUTY TRAVEL		-	-	4,500
G-5 SECRETARY	WR	-	-	12					
.3985									

AMRO-1581, COURSES IN COMMUNITY PSYCHIATRY

Psychiatric care in the Region is centralized in psychiatric hospitals and external consultation clinics that provide services for the big cities. Coverage is insufficient and only reaches a fraction of the urban population. The purpose of this project is to expand minimum psychiatric care services to the rural areas and marginal neighborhoods of the cities by training doctors and general nurses in basic psychiatry, crisis intervention, early diagnosis and reference of cases, follow-up on discharged cases and administration of simple psychopharmaceutical and psychotherapeutical treatment as an important part of family health activities.

TOTAL		1	1	1	TOTAL	PR	11,700	13,000	3,400
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		1,000	1,500	-
					COURSE COSTS		8,000	8,500	-

AMRO-1583, EPIDEMIOLOGY OF ALCOHOLISM

Drug and alcohol abuse are growing at an alarming rate and have widespread economic, social and health consequences for the family, the individual and society. The extent and distribution of alcohol and other drug abuse in the Region continue to grow at an alarming rate. Youth is known to be a group which is greatly affected. However, very few governments have developed programs for combatting these problems. This project follows up the previous epidemiological research carried out by PAHO/WHO with action directed at the control of alcohol and other drug abuse. Provision is made for technical assistance to governments to design workable prevention, education and treatment programs within the context of their existing family health and mental health programs.

TOTAL		24	6	-	TOTAL	PG	102,635	14,078	-
P-4 SOCIOLOGIST	PG	12	3	-	PERSONNEL-POSTS		44,240	12,000	-
.3983					PERSONNEL-CONSULTANTS		6,527	-	-
G-5 SECRETARY	PG	12	3	-	DUTY TRAVEL		9,500	2,078	-
.3985					SUPPLIES AND EQUIPMENT		6,868	-	-
TOTAL		2	-	-	LOCAL COSTS		35,500	-	-
CONSULTANT MONTHS	PG	2	-	-					

AMRO-1600, DENTAL HEALTH

There is a high prevalence and incidence of dental disease in Latin America and limited provision of preventive and curative dental services. There is a shortage of dental personnel, both professional and auxiliary, and of effective systems to provide comprehensive dental services. This project collaborated in the conduct of national dental health and manpower surveys in Venezuela, Colombia and Mexico, and in the preliminary review of the delivery of dental services and the situation regarding dental health manpower in the English-speaking Caribbean. A school for the preparation of dental auxiliaries has been established in Jamaica, and a further project is in the process of being implemented in Trinidad. The use of dental auxiliary personnel is commencing in other Caribbean countries and territories. Integrated dental clinics for services to the community have been established in Venezuela, Mexico, Guatemala, Panama, Chile and Ecuador, simplified dental equipment installed in such clinics, and additional laboratories established for experimentation into the use of dental personnel and new delivery systems for dental care. It is necessary to bring together experts with experience in the field of dental programs in order to evaluate the achievement of these and other programs in the field. It is also necessary to utilize a concerted and comprehensive approach to the resolution of complex problems and to apply current knowledge for the improvement of the Organization's approach to the programs to be developed in countries in Latin America, including review of the means of integrating these services within comprehensive family health programs.

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It is proposed to refine the methodology for conducting dental health surveys and to develop dental health planning, developing improved methods for the utilization of dental personnel and the application of preventive and curative measures, insofar as possible integrating these services into comprehensive family health programs. It is envisaged that, through a combined approach involving use of auxiliary personnel, new systems of care delivery, improved payment mechanisms and equipment, the range of services available to persons in Latin America will be expanded. It is also proposed to hold a continuing series of seminars to evaluate dental programs, their approach and achievements, and to initiate the interchange of information and provide experience for the development of programs in Latin America. It is also proposed to establish an advisory group and conduct follow-up seminars with experts, based on the initial experience of the seminar held in 1973.

TOTAL		24	24	24	TOTAL	PR	83,935	92,395	96,330
P-5 DENTAL OFFICER	PR	12	12	12	PERSONNEL-POSTS		62,335	65,995	69,730
.3015					PERSONNEL-CONSULTANTS		5,400	6,000	13,600
G-5 SECRETARY	PR	12	12	12	DUTY TRAVEL		7,500	8,000	8,000
.0876					SEMINAR COSTS		5,000	8,000	-
TOTAL		2	2	4	SUPPLIES AND EQUIPMENT		3,700	4,400	5,000
CONSULTANT MONTHS	PR	2	2	4					

AMRO-1670, DENTAL EPIDEMIOLOGY

Despite the high prevalence and incidence of dental disease in Latin America, few countries in the Region have adequate, well-documented data on the extent of such diseases. It is necessary to improve the availability of knowledge in this regard and to train personnel capable of conducting dental epidemiological and planning surveys. The factors associated with the presence or absence of dental disease in communities require further study, together with any causative agents that may be associated with these conditions. Courses in dental epidemiology have been held at the School of Public Health, São Paulo, and at the Faculty of Dentistry, Zacatecas, Mexico, and epidemiological surveys conducted in Colombia and Venezuela. A survey utilizing new methodology was conducted in Montserrat. The National School of Public Health, Colombia, is participating in the PAHO/WHO program for International Centers in Dental Epidemiology, and an investigation into the causative factors of caries prevalence in two communities has been initiated. A reference Center in Oral Pathology has been established in Chile and a program in dental epidemiology established with the University of Piracicaba in Brazil.

It is proposed to stimulate the training of additional personnel in the field of dental epidemiology, to improve the basic knowledge of dental health conditions in the Americas, and to disseminate improved methodologies for the collection of such data. Collaborative programs will be established with international agencies, and educational materials will be prepared to improve the knowledge and information available to epidemiologists in Latin America. Investigation into the factors associated with presence of dental disease will continue.

TOTAL		1	1	1	TOTAL	WR	3,900	4,400	4,900
CONSULTANT MONTHS	WR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SUPPLIES AND EQUIPMENT		1,200	1,400	1,500

AMRO-1671, FLUORIDATION

The fluoridation of water supplies has been accepted as an effective method for the prevention of dental caries. The implementation of this measure in Latin America has been slow, and at this time only 30 million people are benefitting from this preventive measure. Only three countries in Latin America currently produce fluoride compounds.

National fluoridation programs need to be promoted and implemented in order to comply with the targets established in the Ten-Year Health Plan for the Americas for cities with over 50,000 inhabitants. Engineers responsible for water supplies and water treatment technicians need to be trained and adequate educational and informative material prepared and disseminated in the languages of the Region. Appropriate systems of data collection need to be devised and new techniques developed to maximize the use of fluoride compounds that are available within the Region. Research must be conducted into the use of additional vehicles so as to make fluoride benefits available to those communities currently not receiving them.

TOTAL		24	24	24	TOTAL		71,606	73,815	78,975
P-4 SANITARY ENGINEER	PR	12	12	12	SUBTOTAL	PR	67,235	73,815	78,975
.3027					PERSONNEL-POSTS		54,535	57,815	61,175
G-5 SECRETARY	PR	12	12	12	PERSONNEL-CONSULTANTS		2,700	6,000	6,800
.4109					DUTY TRAVEL		6,500	6,000	6,500
TOTAL		1	2	2	SUPPLIES AND EQUIPMENT		3,500	4,000	4,500
CONSULTANT MONTHS	PR	1	2	2	SUBTOTAL	PM	4,371	-	-
					SUPPLIES AND EQUIPMENT		4,371	-	-

AMRO-1672, LABORATORY FOR CONTROL OF DENTAL PRODUCTS

There is a lack of standardization and quality control in dental materials used in Latin America and, until the initiation of the PAHO/WHO program, no Latin American country had a laboratory for quality control of dental products. There is no government control of dental products and no coordination between teaching in dental materials and the clinical application of such materials, either in public programs or private practice. Dental materials are utilized in the traditional form and are not

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oriented towards treatment of large population groups such as encountered in Latin America. A center for dental materials has been established in Venezuela, in collaboration with the Central University and other dental schools, and teaching personnel is being trained in this specialized field. A survey has been conducted on the teaching and use of dental materials in Latin America, and one international seminar has been held at the Dental Materials Center in Venezuela. The first extensive field studies in Latin America of new materials with possible application to large groups of population for the prevention of dental caries have been initiated in five sites in four countries, and a regional program in dental materials has been held at the Dental Materials Center in Venezuela. Another regional program in dental materials has been approved for Central America and Panamá.

TOTAL	PH	10,813	-	-
CONTRACTUAL SERVICES		4,400	-	-
SUPPLIES AND EQUIPMENT		6,413	-	-

AMRO-1673, HUMAN AND MATERIAL RESOURCES IN DENTISTRY

In Latin America there is a scarcity, in terms of needs and population, of the human and material resources necessary to provide preventive, curative and rehabilitative services in dentistry. There is a shortage of appropriate equipment for the provision of dental care in urban and rural areas and a need for modern management techniques to produce effective interaction between human and technical resources and the socioeconomic system. The program has currently produced a basic design for a simplified dental unit which has been tested and assembled in Colombia, Argentina and Venezuela and is receiving further testing in Mexico, Barbados, Cuba, Panama, Honduras, El Salvador and Ecuador. Courses on the use of simplified dental equipment have been given in Argentina, Brazil, Chile, Colombia and Venezuela. A dental unit is currently available, based on designs provided by PAHO/WHO.

Facilities for the provision of dental care have been designed for the use of such equipment in Ecuador, Venezuela and Mexico. In the field of education, a simplified program learning machine has been developed in Brazil, and programs for the training of personnel in specific technical areas have been developed in Medellín and Cali, Colombia, and in Venezuela and Chile.

It is proposed to continue to provide assistance to countries in the design, development and utilization of improved equipment for the provision of dental care programs in urban and rural areas; to prepare manuals on administration and the construction and design of dental facilities, including systems approaches for the provision of care and analysis of dental programs; and to conduct courses in management for dental personnel.

TOTAL		12	12	12	TOTAL		25,564	26,895	40,995
P-3 DENTAL HYGIENIST	PR	12	12	12	SUBTOTAL	PR	25,410	26,895	40,995
.4631					PERSONNEL-POSTS		22,410	23,695	37,495
					DUTY TRAVEL		3,000	3,200	3,500
					SUBTOTAL	PH	154	-	-
					SUPPLIES AND EQUIPMENT		154	-	-

AMRO-1674, COMMUNICATIONS AND INFORMATION IN DENTAL SCIENCE

There is a lack of a coordinating mechanism for the collection and distribution of information related to recent advances in dentistry in the Region.

It is proposed to provide the dental profession of the Hemisphere with current information on aspects of dental science and administration through publications written in the languages of the Region.

TOTAL		2	2	2	TOTAL		10,993	11,000	12,800
CONSULTANT MONTHS	PR	2	2	2	SUBTOTAL	PR	9,400	11,000	12,800
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SUPPLIES AND EQUIPMENT		4,000	5,000	6,000
					SUBTOTAL	PH	1,593	-	-
					SUPPLIES AND EQUIPMENT		1,593	-	-

AMRO-1676, RESEARCH ON PLAQUE IN COMMUNITIES WITH HIGH AND LOW INCIDENCE OF CARIES

The purpose of this project is to carry out an investigation on plaque in communities in Colombia with high and low incidence of caries. The study in two communities includes the chemical composition of plaque, its acid production, rate of flow of saliva in patients, water analysis, and other related tests.

FUND				FUND			
1977	1978	1979		1977	1978	1979	
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				\$	\$	\$	
TOTAL				PH	39,714	-	-
CONSULTANT MONTHS				PH	1	-	-
				PERSONNEL-CONSULTANTS	2,000	-	-
				CONTRACTUAL SERVICES	16,492	-	-
				SUPPLIES AND EQUIPMENT	3,860	-	-
				GRANTS	13,247	-	-
				COMMON SERVICES	4,115	-	-

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AMRO-2172, RURAL WATER SUPPLY AND SANITATION

Efforts to provide water supplies and sanitation have brought safe and convenient water systems to about 43 million of the 121 million rural inhabitants in the Region; approximately 65% of the rural inhabitants still lack these essential services.

In order to assist the countries achieve the goals they have established, this project will serve as a catalyst and cross-fertilizer of ideas, strategies and techniques that will promote a more appropriate balance between the social and developmental priorities, resources and financial support being assigned to this Region; accelerate the current rates of coverage; improve long-term operation and maintenance performance; and improve the quality of the water and services being provided.

TOTAL		24	24	24	TOTAL	PR	72,575	76,955	82,110
P-5 SANITARY ENGINEER .4382	PR	12	12	12	PERSONNEL-POSTS		59,475	62,955	66,480
G-4 SECRETARY .1099	PR	12	12	12	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
					DUTY TRAVEL		5,000	5,000	5,430
TOTAL		3	3	3					
CONSULTANT MONTHS	PR	3	3	3					

AMRO-2173, INSTITUTIONAL DEVELOPMENT

The institutional development program provides assistance to the countries to improve the capability of their environmental health institutions so they can cope with the problems of the present and the challenges of the future. It is an integrated process directed to the solution of problems and weaknesses and the designing and implementation of plans, strategies, systems and structures in the engineering, economic, financing, managerial and administrative fields needed to improve institutions. Concurrent with these efforts, programs to train teachers, prepare teaching materials and provide assistance for the development of national training facilities are also being developed.

The program is self-financing in nature, operates mostly on a reimbursable basis, promotes the development of national capabilities through the use of indigenous consultants, structures and methodologies that permit the continuation of improvement efforts when PAHO's assistance is completed, and serves as a delivery system for the transfer and adaptation of technology and the provision of technical cooperation services. Its approach is global, looking at the institution as a whole and focusing attention on the interactions and linkages required between the institutional components and for the development of human resources, as well as integral and at all levels.

TOTAL		144	144	144	TOTAL		256,452	270,650	290,735
P-5 MANAGEMENT ADVISER .0850	PR	12	12	12	SUBTOTAL	PR	228,860	241,300	259,335
P-5 SANITARY ENGINEER .3120	PR	12	12	12					
P-4 MANAGEMENT ADVISER .3581	PR	12	12	12	PERSONNEL-POSTS		200,760	212,300	224,020
P-4 MANAGEMENT ADVISER .4136 .4137 .4209 .4213	PW	48	48	48	PERSONNEL-CONSULTANTS		8,100	9,000	13,600
P-4 SANITARY ENGINEER .3509	PR	12	12	12	DUTY TRAVEL		20,000	20,000	21,715
G-5 SECRETARY .0852	PR	12	12	12	SUBTOTAL	PW	27,550	29,350	31,400
G-5 SECRETARY .3889	PW	12	12	12					
G-4 CLERK .3780	PR	12	12	12	PERSONNEL-POSTS		27,550	29,350	31,400
G-4 CLERK .4917	PW	12	12	12	SUBTOTAL	PH	42	-	-
TOTAL		3	3	4					
CONSULTANT MONTHS	PR	3	3	4	SUPPLIES AND EQUIPMENT		42	-	-

AMRO-2174, CARIBBEAN BASIN WATER MANAGEMENT PROGRAM

The purpose of this program is to contribute to the improvement of public health by maximizing the contribution of the countries' water and sewerage sector to economic and social development.

This program serves to assist the countries of the Caribbean region in the planning and implementation of water and sewerage agency institutional development activities with principal emphasis on improving the managerial and operating skills of agency personnel through training and human resource development, and in the improvement of drinking water quality.

Specifically, the goals are, through a planned program of training, to develop the managerial, professional and technical capabilities of agency staff members, and to prepare selected individuals to assume increased responsibility; to assist agency managers in the continuing improvement of their institutions through the provision of short-term consultants; to follow-up on the Pan American Conference on Drinking Water Quality Improvement held in August 1976 in order to assist the countries to achieve the highest level of drinking water quality possible; and, through continuing liaison, to foster cooperation between all water and sewerage agencies in the Caribbean region.

FUND				FUND			
1977 1978 1979				1977 1978 1979			
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AMRO-2970, DEVELOPMENT OF RIVER BASINS

The purpose of this project is to provide technical cooperation to the Governments in the establishment and implementation of integrated policies which would include health considerations and participation of the health sector in the definition, formulation, execution and evaluation of river basin development projects.

Several countries of the Region are conducting river basin development projects. PAHO/WHO is cooperating in the conduct of studies leading to the establishment of policies which incorporate the study and assessment of health-related aspects, the collection of information on health implications, and the preparation of personnel to participate in the various phases of river basin development.

TOTAL		4	4	5	TOTAL	PR	10,800	12,000	17,000
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CONSULTANT MONTHS	PR	4	4	5	PERSONNEL-CONSULTANTS		10,800	12,000	17,000

AMRO-3100, ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH

The Ministers of Health and of Agriculture of the Americas have always been concerned about the availability and quality of the food required to maintain and improve the health level of the people. To provide adequate functional caloric and protein requirements, the production of food needs to be improved and increased. Meat and milk continue to be the most important sources of animal protein.

The lack of teaching and training of human resources unquestionably increases the economic losses that constantly affect the budgets of the Member Countries. Food hygiene programs are needed to prevent foodstuff serving as vehicles for infectious agents and toxins, as well as to preserve food, particularly protein-rich food of animal origin.

Great quantities of food are lost every year due to damage by inadequate preparation, transportation, storage and lack of sanitation in commercialization. To solve this problem, coordinated efforts among the producer, processing plants, food industry and control agencies are required.

The Organization provides technical assistance and plans to the ministries of agriculture and of health to control and prevent animal diseases and the zoonoses.

TOTAL		72	72	72	TOTAL		199,110	212,415	231,035
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P-6 VETERINARIAN .4691	PR	12	12	12	PR	112,990	124,435	136,975	
P-5 VETERINARIAN .4793	PR	12	12	12					
P-5 VETERINARIAN 4.3290	WR	12	12	12	PERSONNEL-POSTS	106,990	113,135	124,015	
G-5 SECRETARY 4.3251 4.3787	WR	24	24	24	DUTY TRAVEL	6,000	11,300	12,960	
G-4 SECRETARY .4111	PR	12	12	12	WR	86,120	87,980	94,060	
					-----	-----	-----	-----	-----
					PERSONNEL-POSTS	74,120	79,400	85,240	
					DUTY TRAVEL	12,000	8,500	8,820	

AMRO-3171, CONSERVATION OF NON-HUMAN PRIMATES

The purpose of this project is to assist the Government of Peru in the conservation and non-conflicting utilization of native fauna. The initial emphasis is on non-human primates of interest to biomedical research. A site near Iquitos is being developed as a captive breeding facility for the two species of primate most urgently in demand. The first breeding room is nearing completion. A vehicle, speed boat, portable generator and other ancillary equipment have been provided. The cooperation of the Peruvian Ministry of Agriculture, San Marcos University and particularly their research offshoot, the "Instituto Veterinario de Investigaciones Tropicales y de Altura" is reflected in the provision of the site, an office and staff. The necessary decree permitting the trapping of the required animals both for breeding stock and limited export has been granted by the Peruvian Government.

The principal requirement for the development of the project is the immediate availability of sufficient funds to proceed at once with the building of breeding rooms to house the animals for which trapping permission has been granted. In addition expert advice on the design of the laboratories which are an integral part of the development is required, and possibly experienced veterinary assistance with animal health problems.

TOTAL		24	-	-	TOTAL	PG	155,770	-	-
-----		-----	-----	-----	-----		-----	-----	-----
P-2 MAMMALOGIST .4552	PG	12	-	-	PERSONNEL-POSTS		75,519	-	-
P-1 ADMINISTRATIVE OFFICER .4616	PG	12	-	-	PERSONNEL-CONSULTANTS		25,670	-	-
					DUTY TRAVEL		1,245	-	-
					SUPPLIES AND EQUIPMENT		14,082	-	-
TOTAL		7	-	-	LOCAL PERSONNEL COSTS		39,054	-	-
-----		-----	-----	-----			-----	-----	-----
CONSULTANT MONTHS	PG	7	-	-					

AMRO-3180, CONFERENCE ON THE USE OF SOUTH AMERICAN PRIMATES FOR BIOMEDICAL RESEARCH

The purpose of this project is to provide a forum for increasing public, governmental and professional awareness of the factors bearing on the availability of primates for medical research, which will lead to supply sources and modalities that will meet research needs and at the same time be consistent with the interests of Governments and of those concerned with the protection and perpetuation of animal species.

FUND	1977	1978	1979
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	\$	\$	\$

TOTAL	PG	2,000	-	-
SEMINAR COSTS		2,000	-	-

AMRO-3200. PAN AMERICAN FOOT-AND-MOUTH DISEASE CENTER

PANAFTOSA, with headquarters in Rio de Janeiro, Brazil, is a cooperative project between the Pan American Health Organization and the Government of Brazil. It provides training to specialists from various countries, disseminates knowledge, and provides technical assistance to national authorities in the fight against this disease. It also conducts needed research to enable it to assist countries in the various laboratory and field techniques. In recent years, this research has been directed primarily toward the study of new vaccines; efficient, feasible, and economic control techniques; new vesicular disease control techniques; and the study of carriers. The Center has been fully integrated into the programs of PAHO/WHO since 1968, and is financed by means of a system of assessments on Member Countries, in accordance with recommendations and resolutions adopted by the PAHO Directing Council.

The Center conducts three principal categories of activities: a) technical assistance; b) research, diagnosis, and reference; and c) training and information. Field technical advisory services are provided through the staff of the Center and consultants located in the different countries. The Technical Council of the Center, composed of the Ministers of Agriculture of the Hemisphere, meets annually at the Inter-American Meeting on Foot-and-Mouth Disease and Zoonoses Control and reviews the budget and program of activities of the Center. The Ministers of Agriculture adopt a resolution recommending that the PAHO/WHO Directing Council approve the budget as reviewed. They also discuss and establish certain lines of activity pertaining to the control of foot-and-mouth disease and make recommendations compatible with the Center's program of activities, which is developed along the lines of the four-year country projections for controlling the disease. The four-year projections of the Center are developed in a similar manner.

The technical advisory activities of PANAFTOSA are oriented towards helping the countries according to the status of the disease in each one, the existing national control programs, and the profile developed for that country. The profile is a report based on an estimate of the capability of each country to conduct a control program, taking into account available financial and human resources.

The Center pays special attention to problems related to the epidemiological surveillance of the disease and to program planning and evaluation.

The research, diagnosis and reference activities of the Center are primarily concentrated on the study of new vaccines that could provide longer-lasting immunity and reduce the number of annual revaccinations that must be performed under the programs; the study of new methods for a more rapid diagnosis of vesicular diseases; the study of new techniques for controlling the efficacy of vaccines; studies to determine the role played by virus carrier animals in the epidemiology and pathogenesis of foot-and-mouth disease; studies on the epidemiological nature of the disease; the study of new antigen sources; the study of new methods to determine the immunity levels of vaccinated populations; and the study of the role played by local immunity in protecting animals.

The training activities of PANAFTOSA primarily concern the training of personnel required by the different countries in the Continent to conduct their control and prevention programs. These activities are performed through international courses and seminars, individual training, and national courses on virology, immunology, biochemistry, diagnosis, tissue culture, industrial-scale vaccine production, vaccine control, epidemiology, field services, planning, and evaluation of control programs. The level and scope of the training provided by the Center is determined by analysis of the country profiles, which indicate requirements, areas, and the number of personnel that each country must train.

TOTAL		1897	1908	1908	TOTAL	2,262,322	2,351,755	2,438,435
P-5	CHIEF OF FIELD SERVICES .0625	PR	12	12	12			
P-5	CHIEF, LABORATORY SERVICES .0626	PR	12	12	12			
P-5	DIRECTOR .0624	PR	12	12	12			
P-4	ADMIN. METHODS OFFICER .3230	PR	12	12	12			
P-4	ADMINISTRATIVE OFFICER .0636	PR	12	12	12			
P-4	BIOCHEMIST .3062	PR	12	12	12			
P-4	CHIEF OF TRAINING .2050	PR	12	12	12			
P-4	EPIDEMIOLOGIST .0627 .3757	PR	24	24	24			
P-4	RESEARCH OFFICER .0633 .2049	PR	24	24	24			
P-4	SEROLOGIST .3231	PR	12	12	12			
P-4	STATISTICIAN .3063	PR	12	12	12			
P-4	VACCINE CONSULTANT .3232	PR	12	12	12			
P-2	RESEARCH ASSOCIATE .0640	PR	12	12	12			
P-1	RESEARCH ASSOCIATE .0639	PR	12	12	12			
G-10	RESEARCH ASSISTANT .0641	PR	12	12	12			
G-8	ACCOUNTING TECHNICIAN .0642	PR	12	12	12			
G-8	RESEARCH ASSISTANT .3069 .3070 .3924	PR	36	36	36			
G-7	ACCOUNTING TECHNICIAN .0179	PR	12	12	12			
G-7	ADMINISTRATIVE ASSISTANT .0645	PR	12	12	12			
G-6	ACCOUNTING CLERK .0647	PR	12	12	12			
G-6	ADMINISTRATIVE ASSISTANT .0646 .0653 .0654	PR	36	36	36			
G-6	CLERK .0645 .0652	PR	24	24	24			
G-6	LABORATORY ASSISTANT .4115	PR	12	12	12			
SUBTOTAL						PR	2,169,245	2,351,755
PERSONNEL-POSTS							1,516,370	1,619,190
PERSONNEL-CONSULTANTS							7,000	8,000
DUTY TRAVEL							90,505	111,305
PRINTING AND BINDING							6,550	10,000
SEMINAR COSTS							50,000	34,000
HOSPITALITY							500	500
SUPPLIES AND EQUIPMENT							322,200	373,760
FELLOWSHIPS							65,000	80,000
COMMON SERVICES							111,120	115,000
SUBTOTAL						PG	93,077	-
SEMINAR COSTS							3,594	-
SUPPLIES AND EQUIPMENT							67,093	-
FELLOWSHIPS							5,218	-
COMMON SERVICES							17,172	-

		FUND	1977	1978	1979			FUND	1977	1978	1979
									\$	\$	\$
G-6	SECRETARY	PR	12	12	12						
	.0648										
G-5	ACCOUNTING CLERK	PR	12	12	12						
	.0672										
G-5	CLERK	PR	84	84	84						
	.0656 .0658 .1000 .3595										
	.4123 .4124 .4298										
G-5	LABORATORY ASSISTANT	PR	36	36	36						
	.0655 .0657 .0659										
G-5	SECRETARY	PR	60	60	60						
	.0650 .0651 .3233 .3588										
	.3594										
G-4	CLERK	PR	132	132	132						
	.0660 .0666 .0699 .0705										
	.0998 .3244 .3592 .3596										
	.3760 .3934 .3935										
G-4	LABORATORY HELPER	PR	72	72	72						
	.0661 .0663 .0668 .0669										
	.3758 .3759										
G-3	CLERK	PR	120	120	120						
	.0662 .0664 .0670 .0671										
	.0674 .0679 .0690 .0733										
	.0999 .3238										
G-3	CLERK-TYPIST	PR	1	12	12						
	.3250										
G-3	LABORATORY HELPER	PR	120	120	120						
	.0665 .0667 .0683 .0698										
	.0754 .0997 .3234 .3589										
	.3590 .3591										
G-3	LABORER	PR	12	12	12						
	.0725										
G-2	CLERK	PR	60	60	60						
	.0678 .0685 .0692 .2054										
	.3237										
G-2	DRIVER	PR	144	144	144						
	.0675 .0676 .0677 .0694										
	.0700 .0701 .0719 .0738										
	.2132 .3243 .3248 .3249										
G-2	LABORATORY HELPER	PR	264	264	264						
	.0673 .0680 .0681 .0682										
	.0686 .0687 .0688 .0696										
	.0697 .0702 .0703 .0717										
	.0718 .0723 .0730 .0731										
	.0755 .1001 .3242 .3245										
	.3246 .3247										
G-2	MESSENGER	PR	12	12	12						
	.0735										
G-2	SWITCHBOARD OPERATOR	PR	12	12	12						
	.0728										
G-1	LABORER	PR	384	384	384						
	.0704 .0706 .0707 .0708										
	.0709 .0710 .0712 .0713										
	.0714 .0715 .0716 .0720										
	.0722 .0724 .0726 .0727										
	.0729 .0732 .0734 .0736										
	.0737 .0739 .0740 .1003										
	.3236 .3239 .3240 .3241										
	.3252 .3253 .3254 .3255										
TOTAL			2	2	2						
CONSULTANT MONTHS			2	2	2						
TOTAL			103	105	78						
FELLOWSHIP MONTHS			96	105	78						
FELLOWSHIP MONTHS			7	-	-						

AMRO-3300, PAN AMERICAN ZOOSES CENTER

CEPANZO offers technical assistance to Member Governments through its programs for the control and eradication of the zoonoses. Essential for such programs is the training of fellows in diagnosis of zoonoses, and the production and control of biologicals. These programs are complemented by courses in animal health planning for the dissemination of specific techniques required for the various programs being developed. Activities are directed at the problems now existing in the countries to support actions undertaken by national technical services.

Work is continuing in the fields of brucellosis, rabies, hydatidosis and bovine tuberculosis. Brucellosis is studied directly in its diagnostic phases, vaccine production and control programs. In the field of rabies, planning is under way for the reduction and control of this disease. Serological studies of human hydatidosis have achieved promising advances in diagnosis of the disease. Coordination is being sought with individual laboratories in each country in order to consolidate immunological diagnosis in all the countries of the southern cone. The training of laboratory technicians capable of preparing effective standardized tuberculin is making it possible to reach a point of definite diagnosis in programs for the control of this disease. Associated with this effort is the establishment of a mycobacterial reference laboratory. Epidemiological surveillance of rabies and equine encephalitis provides monthly reference material which is essential for the entire Hemisphere. The Center has organized a unit for the study of food microbiology. Connected with the programming, epidemiology and biostatistical units is the pathology unit. All of these work in cooperation with units involved in the study of specific diseases.

Special attention has been given to distribution to all countries of technical information on the technical sectors of public health, agriculture and stockraising. The most recent advances in zoonoses are presented in a newsletter. Advisory services are given to all research projects in this field. The Center is greatly interested in receiving samples or sera from such projects. Library services at the Center supply bibliographic references on zoonoses to all countries.

FUND				FUND			
1977 1978 1979				1977 1978 1979			
-----				-----			

	FUND	1977	1978	1979
	----	----	----	----
TOTAL		3	3	3
		----	----	----
CONSULTANT MONTHS	PR	3	3	3
TOTAL		54	44	44
		----	----	----
FELLOWSHIP MONTHS	PR	44	44	44
FELLOWSHIP MONTHS	UNDP	10	-	-

FUND	1977	1978	1979
----	-----	-----	-----
	\$	\$	\$

AMRO-3370, RABIES CONTROL

Canine rabies is still a serious public health problem in many countries of the Region. Bovine paralytic rabies, mainly due to attacks by vampire bats, causes serious losses in the production of protein of animal origin. The demands for antirabies vaccine for human and animal use are increasing every year, but laboratories in Latin America are not able to meet these demands, and the importation of vaccine is expensive, particularly for developing countries.

TOTAL		2	2	2	TOTAL	PR	8,000	9,000	10,200
		----	----	----			-----	-----	-----
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SUPPLIES AND EQUIPMENT		2,600	3,000	3,400

AMRO-3500, FOOD HYGIENE

Improvement in the wholesomeness, quality and availability of food--particularly food of animal origin--for the reduction of human illness and economic losses which result from chemical, microbial and physical contamination is the purpose of this project. Achievement of this goal will be met through cooperation with the Member Governments in the planning, design, development and evaluation of national food protection programs, including definition of the role of the health sector, strengthening of the national food control services and supportive laboratories, and the adoption of uniform food quality standards.

TOTAL		24	24	24	TOTAL		75,355	83,375	88,950
		----	----	----			-----	-----	-----
P-5 FOOD HYGIENIST	WR	12	12	12	SUBTOTAL	PR	16,955	18,175	19,450
4,3786							-----	-----	-----
G-6 CLERK	PR	12	12	12	PERSONNEL-POSTS		16,955	18,175	19,450
.0017							-----	-----	-----
TOTAL		2	2	2	SUBTOTAL	WR	58,400	65,200	69,500
		----	----	----			-----	-----	-----
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-POSTS		44,000	47,200	50,700
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		7,000	9,000	9,000
					SUPPLIES AND EQUIPMENT		2,000	3,000	3,000

AMRO-3571, FOOD HYGIENE TRAINING CENTER

Growth of food industries, combined with mass migration of populations to the urban centers, has created conditions unsuitable to food wholesomeness, and the problems have progressed beyond the technical capacity of the governments' central food services. This food hygiene training center is providing an instructional program on food protection with emphasis on inspection and control techniques as well as on the basic principles of food technology. Advanced instruction is available for professionals, as are basic courses for inspectors. Several countries are developing national and local food safety programs with the assistance of these trained inspectors but are still in need of a sizeable number of personnel with knowledge of the principles and practices of food protection.

TOTAL		12	12	12	TOTAL	WR	63,800	67,900	72,600
		----	----	----			-----	-----	-----
P-4 TRAINING OFFICER	WR	12	12	12	PERSONNEL-POSTS		41,000	44,200	47,700
4,3439					PERSONNEL-CONSULTANTS		8,100	9,000	10,200
TOTAL		3	3	3	DUTY TRAVEL		3,700	3,700	3,700
		----	----	----	SUPPLIES AND EQUIPMENT		5,000	5,000	5,000
CONSULTANT MONTHS	WR	3	3	3	GRANTS		6,000	6,000	6,000

AMRO-3600, DRUG CONTROL

The increasing medical and economical importance of drugs in modern health care requires that governments carefully monitor the available products to assure their safety, efficacy and quality. PAHO/WHO encourages and provides technical assistance to the governments for developing lists of basic (essential) drugs that correspond to the needs of the population and for establishing effective methods of drug control. These methods include updated procedures for the registration of drugs, adoption of standards for good manufacturing practices, quality control, and operation of a national drug agency. Training is provided for their analysts, inspectors and drug law administrators.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

In addition to the individual governments, guidance and assistance are being provided to groups of governments, such as the Andean Pact Group and the Caribbean Community countries (CARICOM), operating under their agreement to establish the Caribbean Regional Drug Testing Laboratory in Kingston, Jamaica. The CARICOM countries are proceeding also with a regional drug plan. Countries within these groups experience similar problems and have the same needs.

TOTAL		24	24	24	TOTAL		75,035	79,495	84,530
P-5 DRUG CONSULTANT	PR	12	12	12					
2006									
G-5 SECRETARY	WR	12	12	12	SUBTOTAL	PR	54,575	63,355	67,260
4.0026									
TOTAL		2	2	2	PERSONNEL-POSTS		47,275	49,855	52,460
					PERSONNEL-CONSULTANTS		-	6,000	6,800
CONSULTANT MONTHS	PR	-	2	2	DUTY TRAVEL		7,300	7,500	8,000
CONSULTANT MONTHS	WR	2	-	-	SUBTOTAL	WR	20,460	16,140	17,270
					PERSONNEL-POSTS		15,060	16,140	17,270
					PERSONNEL-CONSULTANTS		5,400	-	-

AMRO-3700, TRAFFIC ACCIDENTS

As a response to the growing interest of the governments in the problem of traffic accidents, which are responsible for between 10 and 40% of deaths from all accidents and which also are an important cause of absenteeism from work and of disability, PAHO/WHO will continue to encourage better understanding of the conditioning factors, the causes of traffic accidents and ways of preventing them. To this end, governments will be advised on the design and operation of adequate statistical systems, the implementation of epidemiological studies and the promotion of educational activities for the prevention of accidents and for speeding up the recovery of accident victims.

TOTAL		2	2	2	TOTAL	WR	12,100	16,000	6,800
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SEMINAR COSTS		6,000	9,000	-
					SUPPLIES AND EQUIPMENT		700	1,000	-

AMRO-4100, SYSTEMS OF NURSING SERVICES

The purpose of this project is to assist governments in the development of effective and efficient nursing services in accordance with the health system requirement and especially in relation to the extension of primary health care.

The objectives of the project include the dissemination of information and guidelines to national health authorities on new developments and approaches regarding the effective and efficient utilization of nursing personnel; the reorientation and revitalization of nursing services, particularly those at peripheral and basic levels involved in country programs to extend health services coverage with community participation; the monitoring and evaluation of the situation in the Region, with PAHO/WHO cooperation; and the direct assistance to countries in programming the nursing component of projects to extend health coverage.

TOTAL		48	48	48	TOTAL		132,475	141,305	163,195
P-6 NURSE	WR	12	12	12					
4.0080									
P-4 NURSE	PR	12	12	12	SUBTOTAL	PR	67,475	72,105	90,495
2177									
G-5 CLERK	PR	12	12	12	PERSONNEL-POSTS		53,575	57,605	75,195
0089					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
G-4 SECRETARY	PR	12	12	12	DUTY TRAVEL		6,000	6,000	6,000
3876					SUPPLIES AND EQUIPMENT		2,500	2,500	2,500
TOTAL		2	2	2	SUBTOTAL	WR	65,000	69,200	72,700
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-POSTS		44,000	47,200	50,700
					TECHNICAL ADVISORY COMM.		10,000	10,000	10,000
					DUTY TRAVEL		11,000	12,000	12,000

AMRO-4170, HOSPITAL NURSING SERVICES

The purpose of this project is to cooperate with governments in the development of nursing services in hospitals, particularly the basic hospitals that serve as the first referral level, to provide safe and effective nursing care.

The primary objectives of the project are: strengthening and improvement of the planning, management and evaluation of nursing services of basic hospitals; definition and implementation of nursing services and nursing care standards that ensure the provision of safe and effective nursing care; and updating the knowledge and abilities of existing staff.

Eighteen countries have formulated both hospital and community nursing standards and four additional countries have formulated hospital nursing care standards.

FUND				FUND			
1977	1978	1979		1977	1978	1979	
-----	-----	-----		-----	-----	-----	
				\$	\$	\$	
TOTAL	12	12	12	TOTAL	61,500	65,200	69,200
P-4 NURSE	WR	12	12	PERSONNEL-POSTS	41,000	44,200	47,700
4.2068				TECHNICAL ADVISORY COMM.	13,500	14,000	14,500
				DUTY TRAVEL	6,000	6,000	6,000
				SUPPLIES AND EQUIPMENT	1,000	1,000	1,000

AMRO-4171, PROGRAMMING OF NURSING SERVICES

The purpose of this project is to cooperate with governments in the development of their nursing subsystem so that it meets the requirements of the overall health system to deliver health care.

Specific objectives include the development of a seminar/course each year on programming of six weeks duration for 20 participants; direct assistance to countries in defining the nursing subsystem and the initiation of the process of programming for its development; and collaboration with countries in defining and programming the nursing component of the programs to extend health service coverage.

Thus far, 68 nurses have been prepared in the programming process. Seven countries have initiated the process of defining and programming the development of the system of nursing. In two countries assistance has been provided on preproject formulation for extension of coverage.

TOTAL	36	36	36	TOTAL	152,975	161,075	169,905
P-4 NURSE	PR	12	12	SUBTOTAL	PR	54,375	57,175
.3691							
P-4 NURSE	WR	12	12	PERSONNEL-POSTS	39,475	41,675	43,905
4.4513				PERSONNEL-CONSULTANTS	5,400	6,000	6,800
P-3 NURSE	WR	12	12	DUTY TRAVEL	9,000	9,000	9,000
4.4058				SUPPLIES AND EQUIPMENT	500	500	500
				COURSE COSTS	-	-	9,025
TOTAL		2	2				
CONSULTANT MONTHS	PR	2	2	SUBTOTAL	WR	98,600	103,900
				PERSONNEL-POSTS	72,600	77,900	83,700
				DUTY TRAVEL	6,000	6,000	6,000
				COURSE COSTS	20,000	20,000	10,975

AMRO-4180, COMMUNITY HEALTH NURSING

The purposes of this project are to disseminate information and reorient thinking and attitudes of nurses and health authorities of the countries on community health nursing, including its role in primary health care.

The objective is to develop a series of multidisciplinary seminars or workgroups to introduce nationals to new concepts and approaches in the development of community nursing services.

TOTAL	PR	24,000	24,000	24,700
SEMINAR COSTS		24,000	24,000	24,700

AMRO-4200, LABORATORY SERVICES

The purpose of this project is, in collaboration with Member Governments, to develop programs leading towards the expansion and improvement of all public health and clinical diagnostic laboratory services. In order to conserve both human and physical resources, a policy of central network laboratories is being promoted.

TOTAL	12	12	12	TOTAL	61,100	66,700	71,400
P-5 LABORATORY ADVISER	WR	12	12	PERSONNEL-POSTS	44,000	47,200	50,700
4.0040				PERSONNEL-CONSULTANTS	8,100	9,000	10,200
				DUTY TRAVEL	6,500	8,000	8,000
TOTAL		3	3	SUPPLIES AND EQUIPMENT	2,500	2,500	2,500
CONSULTANT MONTHS	WR	3	3				

AMRO-4280, TRAINING OF LABORATORY PERSONNEL

The need for establishing effective training programs for all levels of laboratory personnel and for all disciplines in public health and clinical diagnostic laboratory work was clearly recognized in the Ten-Year Health Plan for the Americas. The purpose of this project is to promote in the Member Countries the establishment of essential basic training courses within each country. Regional courses will be planned as funds permit.

FUND	1977	1978	1979	FUND	1977	1978	1979
					\$	\$	\$
TOTAL	4	4	4	TOTAL	PR 10,800	12,000	13,600
CONSULTANT MONTHS	PR 4	4	4	PERSONNEL-CONSULTANTS	10,800	12,000	13,600

AMRO-4300, EPIDEMIOLOGICAL SURVEILLANCE

The purposes of this project are to promote the application of epidemiological principles to general public health programs and to develop a coordinated international surveillance system for human and animal diseases in the Americas. Within the countries assistance will be aimed at the integration of surveillance activities into primary health services. Because of the scarcity of well-trained epidemiologists, training will also be given high priority. Activities will include strengthening the curriculum of the Regional Course on Epidemiology in Caracas, international seminars on recent developments in epidemiology, inservice training of PAHO epidemiologists, and collaborative Spanish-language training programs.

In addition to providing surveillance coordination for PAHO/WHO, the staff is also available to provide epidemiological input into other programs and extrabudgetary proposals. The project also develops and disseminates norms and standards for surveillance, analyzes and evaluates surveillance information gathered on a regional basis, responds to requests for assistance in epidemics from Member Countries, and provides feedback in the form of surveillance and disease control information throughout the Region.

TOTAL		60	60	60	TOTAL	210,605	240,065	258,340
P-6 EPIDEMIOLOGIST .0036	PR	12	12	12	SUBTOTAL	PR 163,170	182,865	195,640
P-5 EPIDEMIOLOGIST .3633	PR	12	12	12	PERSONNEL-POSTS	130,870	138,715	146,715
P-4 SURVEILLANCE OFFICER 4.4855	WR	12	12	12	PERSONNEL-CONSULTANTS	-	6,000	6,800
G-6 CLERK .0041	PR	12	12	12	DUTY TRAVEL	7,300	10,500	11,000
G-5 SECRETARY .0046	PR	12	12	12	SEMINAR COSTS	10,000	10,000	10,000
TOTAL		2	2	2	SUPPLIES AND EQUIPMENT	8,000	8,000	8,000
CONSULTANT MONTHS	PR	-	2	2	TRAINING GRANTS	-	2,650	6,125
CONSULTANT MONTHS	WR	2	-	-	COURSE COSTS	7,000	7,000	7,000
					SUBTOTAL	WR 47,435	57,200	60,700
					PERSONNEL-POSTS	29,335	47,200	50,700
					PERSONNEL-CONSULTANTS	5,400	-	-
					DUTY TRAVEL	12,700	10,000	10,000

AMRO-4370, CARIBBEAN EPIDEMIOLOGY CENTER

CAREC, which incorporates the original Trinidad Regional Virus Laboratory, was established at the request of the Ministers of Health of the Commonwealth Caribbean, under the authority of PAHO/WHO, on 1 January 1975.

The Center functions as a specialized technical resource in disease surveillance and has developed a disease surveillance system through epidemiologists designated by each Government. Regular reporting from each territory has been established and a monthly surveillance report produced. CAREC acts as a source of immediate aid to all the territories in the Caribbean participating in or cooperating with it and provides advisory services, while the laboratory provides a back-up diagnostic service. Specialist reference areas are being developed, particularly in virology, parasitology and specific fields of bacteriology. Laboratory needs in the area have been assessed and a program instituted to raise the level of laboratories in each territory by means of regular training courses. Epidemiologists and national health teams are being trained.

Research activities include service assessment of the effectiveness of immunization programs and, in association with the Medical Research Council of the United Kingdom, projects in rabies, leptospirosis, *Wuchereria bancrofti* and *Mansonella ozzardi* are being carried out; research into the problems of streptococcal disease and histocompatibility markers is being carried out in association with the Rockefeller University, New York. Investigation of high density lipo proteins and cardiovascular disease has recently been started and cooperative projects with CFNI and other institutes are being developed in diabetes.

TOTAL		708	792	792	TOTAL	1,162,871	869,400	820,470
P-5 DIRECTOR .4387	PR	12	12	12	SUBTOTAL	PR 186,340	194,745	202,265
P-5 EPIDEMIOLOGIST 4.2042	WR	12	12	12	PERSONNEL-POSTS	159,840	168,745	177,765
P-4 BACTERIOLOGIST .4527	PR	12	12	12	DUTY TRAVEL	6,000	5,500	4,000
P-4 IMMUNOLOGIST .4828	PJ	-	12	12	HOSPITALITY	500	500	500
P-4 PARASITOLOGIST .4462	PJ	12	12	12	COMMON SERVICES	20,000	20,000	20,000
P-4 VETERINARIAN .4827	PJ	12	12	12	SUBTOTAL	PJ 903,771	608,555	548,190
P-4 VIROLOGIST .3909	PR	12	12	12	PERSONNEL-POSTS	330,230	425,405	479,860
P-3 STATISTICIAN .4670	PR	12	12	12	PERSONNEL-CONSULTANTS	4,774	5,000	-
P-2 ADMINISTRATIVE OFFICER .4464	PJ	12	12	12	DUTY TRAVEL	19,511	15,000	16,000
P-2 VIROLOGIST .4463	PJ	12	12	12	CONTRACTUAL SERVICES	16,550	21,700	-
C- LOCALS (CAREC)	PJ	600	672	672	SEMINAR COSTS	35,324	-	-
					SUPPLIES AND EQUIPMENT	201,375	25,510	-
					GRANTS	1,727	-	-
					COURSE COSTS	2,396	-	-
					COMMON SERVICES	131,062	60,310	52,330
					LOCAL COSTS	152,422	45,630	-
					PROGRAM SUPPORT COSTS	8,400	10,000	-

FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

To that end, funds were provided in 1976 to finance temporary consultants who, at the request of the interested countries, will assist the Governments in evaluating PAHO/WHO technical cooperation; in at least one country this work was undertaken during the year. In order to promote and undertake similar evaluations in cooperation with countries that express an interest in it and request it, and to establish a continuing program of evaluation, funds are being assigned for temporary consultants who will devote themselves to these activities in the period 1977-1980.

TOTAL		\$	7	7	TOTAL	PR	24,500	20,000	22,500
CONSULTANT MONTHS	PR	9	7	7	PERSONNEL-CONSULTANTS		24,500	20,000	22,500

AMRO-5100, DEVELOPMENT OF HEALTH SERVICES

The objective of this project is to comply with Resolution XXI of the XXIII Directing Council to give the highest priority to the expansion of health services designed to provide total coverage, in keeping with the life patterns and needs of the communities served, at the same time promoting direct community involvement in local health activities.

Governments have been urged in this Resolution to make explicit in their health programs the decision to expand and improve rural health services and to use all the possible manpower resources of the community served through continuous efforts to train professional, technical and auxiliary personnel in accordance with local needs.

Further, the Sixth Program of Work of WHO recognized that the Ministers of Health of the Americas, in their III Special Meeting, found that 40% of the population lacks health services. They decided to establish as a fundamental objective the extension of the coverage of those services, giving priority to the control of communicable diseases, maternal and child health, nutrition and environmental improvement, and they emphasized the need to plan and strengthen the health systems and to develop the necessary human, physical and financial resources.

The purpose of this project is, therefore, to cooperate with the countries in making use of the most efficient means of programming and developing service coverage, giving priority to the areas agreed upon in the Ten-Year Health Plan for the Americas.

TOTAL		36	36	36	TOTAL		130,155	142,575	149,445
P-6 PROGRAM ADMINISTRATOR .0074	PR	12	12	12	SUBTOTAL	PR	118,855	124,400	129,995
P-5 FIELD COORDINATOR .0009	PR	12	12	12					
G-6 CLERK 4.0082	WR	12	12	12	PERSONNEL-POSTS DUTY TRAVEL		98,855	104,400	109,995
							20,000	20,000	20,000
					SUBTOTAL	WR	11,300	18,175	19,450
					PERSONNEL-POSTS		11,300	18,175	19,450

AMRO-5170, PRIMARY HEALTH SERVICES AND COMMUNITY PARTICIPATION

In accordance with the instructions of the Governing Bodies, PAHO/WHO is assisting the Member Governments in expanding coverage with primary health care services and community participation. Of major importance in the strategy is the coordination of the traditional (informal) health subsystem in the communities with the institutionalized (formal) subsystem in order to make rational use of the human potential of the communities. It is recognized that there is an urgent need to establish methods and techniques suited to the process of extending coverage with primary services, based on a better knowledge of health problems, including the internal dynamics of the operation and organization of the community and of the traditional health subsystem within the context of the overall development of the community.

The objectives of this project are to promote and support the efforts of the Governments of Latin America and the Caribbean to provide the entire population, especially the unserved population in rural areas and shantytowns, with the benefits of health; to expand them through the so-called primary services; and to foster the conscious and active participation of the community. It also covers a series of activities for the development of methodological guides and techniques for local programming, administration, information, technology, use of human resources, logistic support and research that are simple, effective and easily accepted by the population to be covered, all of which is set in the national and/or regional context of economic and social development.

TOTAL		48	48	48	TOTAL		197,860	153,790	168,990
P-5 MEDICAL OFFICER 4.0020 4.0081	WR	24	24	24	SUBTOTAL	PG	48,500	-	-
G-5 SECRETARY 4.0092	WR	12	12	12					
G-4 SECRETARY 4.3028	WR	12	12	12	SEMINAR COSTS		48,500	-	-
					SUBTOTAL	WR	149,360	153,790	168,990
TOTAL		2	2	2					
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-POSTS		115,260	123,640	132,690
					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		16,200	17,000	17,500
					SEMINAR COSTS		10,000	5,150	10,000
					SUPPLIES AND EQUIPMENT		2,500	2,000	2,000

AMRO-5171, EMERGENCY PREPAREDNESS AND DISASTER RELIEF COORDINATION

The Americas are quite vulnerable to natural disasters, particularly earthquakes, hurricanes and floods. PAHO/WHO continues to provide assistance in the rehabilitation phase of health and sanitation services in the areas affected by the Guatemala earthquake, hurricane "Fifi" (Honduras), and the Managua earthquake (Nicaragua). The project also coordinates health assistance through UNO to countries in the Region which qualify for assistance.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

In June 1976 a consultant evaluated the existing program and made specific recommendations on the Organization's emergency preparedness and disaster relief coordination activities. The proposed budget additions attempt to translate these recommendations into a realistic comprehensive program of emergency preparedness and disaster relief in the area of public health and sanitation. Since UNDR0 has the responsibility of overall coordination of international activities in disasters, activities in this project will be developed in association with UNDR0 and WHO Headquarters in Geneva. In November 1976 the Organization sponsored a Seminar on Public Health Administration in Disaster in Antigua, Guatemala. Similar sessions are planned in the other Areas for 1977-1980. High priority will be given to the development of a technical library and data base for disasters in the Region, identification of human and material resources, and the training of PAHO/WHO and national health administrators in the public health aspects of disasters. Additional responsibilities will include the preparation of guides and manuals for procedures following different types of disasters, operational research in disaster epidemiology and applied technology, and technical assistance to countries affected by major disasters.

The Directing Council, in its XXIV meeting, requested the Director to set up a natural disaster relief voluntary fund which could be used promptly in emergency situation. This fund has been established and is available to receive voluntary contributions.

TOTAL		24	24	24	TOTAL	169,370	73,315	79,025
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P-5 MEDICAL OFFICER	PR	12	12	12				
.4484								
G-7 ADMINISTRATIVE ASSISTANT	PR	12	12	12	SUBTOTAL	UNFPA 100,000	-	-
.4809								
					SUPPLIES AND EQUIPMENT	100,000	-	-
					SUBTOTAL	PR 69,370	73,315	75,025
					PERSONNEL-POSTS	66,370	70,315	74,350
					DUTY TRAVEL	3,000	3,000	4,675

AMRO-5200, MEDICAL CARE SYSTEMS

This project is assisting the countries of the Region in the analysis and definition of problems relating to the delivery of health services to individuals and in the design and application of appropriate solutions, within the social and economic context, in order to give the entire population access to the services, through the organization and development of medical care systems as a fundamental component of national health systems.

The specific actions of the project are aimed at strengthening interrelations with the community they serve, producing services appropriate to the needs and expectations of the population; achieving appropriate coverage and concentration of services using the resources available with the greatest efficiency, and developing internal consistency and coordination with the other institutions of the system. Special emphasis is given to the development of the administrative capacity of the institutions whose basic services consist chiefly of primary care actions and which affect the expansion of coverage and the conduct of micro- and macroanalyses, evaluative studies, operational research and organizational behavioral research, development of policies, design of structures, personnel training, transfer of administrative technology, development of information banks and networks, and promotion of the production of hospital inputs.

In conducting the foregoing activities this project will act as the frame of reference and coordination of the specific activities provided for in projects of the 5200 series. In addition, it will be coordinated with the activities aimed at developing systems of clinical information and maintaining and preserving health establishments.

TOTAL		84	84	84	TOTAL	204,640	216,220	232,030
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P-5 HOSPITAL ADMINISTRATOR	PR	12	12	12				
.3785								
P-4 HOSPITAL ADMINISTRATOR	PR	24	24	24	SUBTOTAL	PR 189,580	202,080	214,760
.0977 .3711								
G-6 CLERK	PR	12	12	12	PERSONNEL-POSTS	167,580	177,580	187,760
.2139					DUTY TRAVEL	20,000	22,000	24,000
G-5 CLERK	WR	12	12	12	SUPPLIES AND EQUIPMENT	2,000	2,500	3,000
4.0085								
G-4 SECRETARY	PR	24	24	24	SUBTOTAL	WR 15,060	16,140	17,270
.9012 .2153								
					PERSONNEL-POSTS	15,060	16,140	17,270

AMRO-5201, PLANNING OF HEALTH ESTABLISHMENTS

The fundamental purpose of this project is to contribute to the expansion of the coverage of services and to the better organization of medical care systems through rationalization of the physical investment in the health sector and improvement of installed capacity in establishments and in equipment, whose programming and development will be oriented on the basis of the analysis of the function and activities corresponding to each type of establishment within the national system for the provision of health services.

In order to achieve this purpose the project has the following specific objectives: to collaborate with the governments in the formulation of their respective physical investment plans in the health sector and to advise them on the programming, preparation and development of architectural projects for different types of establishments according to the needs and characteristics of the local situation; to obtain information about criteria, procedures, standards and systems of planning, design and equipping of health establishments, especially intermediate-sized general hospitals used by the countries of the Region, and to analyze this information with a view to extracting general principles and common elements that can be used as guidelines by the countries in developing investment plans that form part of the programs for the extension of service coverage; to investigate and study the feasibility of developing for health establishments, and particularly intermediate-sized general hospitals, model types and model units by sectors that will rationalize their characteristics, dimension and complexity and make it possible to speed up the execution of the respective projects and minimize their costs; to disseminate the results of the foregoing analysis, particularly those aspects that can be generally applied and which therefore can be used as guidelines, subject, of course, to the necessary adaptation for orienting and supporting the efforts of the countries for the development of the physical infrastructure of their health services; and to promote the training of personnel responsible for the foregoing activities in the countries and to assist in the conduct of the pertinent teaching programs. The activities of the project will be conducted using a multidisciplinary approach and in close coordination with those of projects AMRO-5200 and 5202 which are complementary elements.

FUND 1977 1978 1979					FUND 1977 1978 1979				
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FUND 1977 1978 1979

FUND 1977 1978 1979
\$ \$ \$

AMRO-5400, HEALTH STATISTICS

The broad purpose of this project is to promote the organization and strengthening of health records and statistical systems in the countries of the Region so that statistical data adequate in quality and quantity will be available for planning, management and evaluation of health services at local, national and international levels. The project provides consultant services on the organization of records and statistical systems, on the use of computers, and on development of education and training programs in health statistics and medical records. Vital and health statistics for the Region are collected, analyzed and published. Assistance is provided to other units of PAHO/WHO on collection and analysis of data. Regional activities on the International Classification of Diseases are coordinated. Research projects are undertaken involving the application of statistical and epidemiological methods. A Regional Advisory Committee meets at approximately two-year intervals to provide guidelines for the program.

TOTAL		240	240	240	TOTAL	569,675	615,865	673,770
P-6 STATISTICIAN	PR	12	12	12				
.0093								
P-5 STATISTICIAN	PR	12	12	12	SUBTOTAL	410,260	456,995	505,550
.0095								
P-4 STATISTICIAN	PR	12	12	12	PERSONNEL-POSTS	390,625	420,150	455,150
.0100					PERSONNEL-CONSULTANTS	2,700	3,000	3,400
P-4 STATISTICIAN	WR	12	12	12	TECHNICAL ADVISORY COMM.	-	-	10,000
4.3629					DUTY TRAVEL	10,000	10,000	10,000
P-3 STATISTICIAN	PR	24	24	24	STATISTICAL PUBLICATIONS	6,935	23,845	27,000
.0096 .0097								
P-2 STATISTICIAN	PR	36	36	36	SUBTOTAL	159,415	158,870	168,220
.0098 .0102 .0103								
P-2 STATISTICIAN	WR	12	12	12	PERSONNEL-POSTS	123,350	147,715	158,220
4.0055					TECHNICAL ADVISORY COMM.	10,000	-	-
P-1 STATISTICIAN	PR	12	12	12	DUTY TRAVEL	10,000	10,000	10,000
.0101					STATISTICAL PUBLICATIONS	16,065	1,155	-
P-1 STATISTICIAN	WR	12	12	12				
4.0104								
G-6 CLERK	PR	36	36	36				
.0105 .0108 .4057								
G-6 SECRETARY	WR	12	12	12				
4.4103								
G-5 CLERK	PR	12	12	12				
.0106								
G-5 SECRETARY	WR	12	12	12				
4.0107								
G-4 CLERK	PR	12	12	12				
.0110								
G-4 SECRETARY	PR	12	12	12				
.0109								
TOTAL		1	1	1				
CONSULTANT MONTHS	PR	1	1	1				

AMRO-5401, NATIONAL INFORMATION SYSTEMS

The purpose of this project is to cooperate with the countries in developing national information systems. In 1977-1978 the line initiated in 1975 in Costa Rica and reaffirmed in 1976 in Colombia and Peru will be continued. The system of reports on the program for the extension of services to rural areas and to shantytowns in the two above-mentioned countries will be completed and integrated into a general system of reports on statistics of resources and services at the different levels of the health service system.

During this period a start will also be made on the design and implementation of the system of reports on the program for the extension of services in Ecuador and Bolivia, and assistance will be given to Brazil in developing its national epidemiological surveillance system. In 1977 and 1978 PAHO/WHO will participate in seminars on investment programs using international loans intended for the extension of health service coverage and will focus its attention on the program of training in this subject for the period 1975-1980, which provides for a specialized seminar in 1980 that will be attended by participants from six countries of the Region.

TOTAL		12	12	12	TOTAL	PR	62,675	65,855	69,260
P-5 SYSTEMS ANALYST	PR	12	12	12	PERSONNEL-POSTS		47,275	49,855	52,460
.3930					PERSONNEL-CONSULTANTS		5,400	6,000	6,800
TOTAL		2	2	2	DUTY TRAVEL		10,000	10,000	10,000
CONSULTANT MONTHS	PR	2	2	2					

AMRO-5402, BIOSTATISTICS EDUCATION

A shortage of professional-level biostatisticians exists in many parts of the Region. The Ten-Year Health Plan calls for the preparation of 300 professional-level statisticians to direct statistical units in ministries of health, to provide instruction in biostatistics in medical and public health schools, and to advise on design and analysis of research studies. It is difficult to identify qualified and interested candidates for the training, which may require 18 to 24 months. The project provides for an annual short course of six weeks to stimulate interest among faculty members of universities and personnel of the health services for advanced training of longer duration. The course would be given in a different university each year with its instructors coming from several universities.

TOTAL		2	2	2	TOTAL	PR	26,900	27,500	28,300
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SUPPLIES AND EQUIPMENT		1,500	1,500	1,500
					COURSE COSTS		20,000	20,000	20,000

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-5403, LATIN AMERICAN CENTER FOR CLASSIFICATION OF DISEASES

The Latin American Center for Classification of Diseases promotes the use of the Classification throughout Latin America, providing teaching materials and instruction on its use and serving as a reference center. The Center also studies problems of medical certification and collaborates with the statisticians at the Central Office on the preparation of decennial revisions in Spanish and in the preparation of regional seminars and courses for their introduction.

TOTAL		12	12	12	TOTAL		85,165	96,300	62,000
P-1 STATISTICIAN	WR	12	12	12					
4.2069									
TOTAL		1	1	1	SUBTOTAL	PR	41,700	59,000	24,400
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					PRINTING AND BINDING		30,000	20,000	-
					SEMINAR COSTS		-	25,000	10,000
					SUPPLIES AND EQUIPMENT		2,000	4,000	4,000
					GRANTS		7,000	7,000	7,000
					SUBTOTAL	WR	43,465	37,300	37,600
					PERSONNEL-POSTS		19,465	31,300	33,600
					DUTY TRAVEL		4,000	6,000	4,000
					PRINTING AND BINDING		20,000	-	-

AMRO-5405, COMPUTER SCIENCE SERVICES

Computer services are provided to support the administrative and technical work of the Organization, and members of the computer sciences group provide advisory services to health agencies of Member Governments. Activities include design and computer programming, computer usage, encoding, and data analysis and interpretation.

TOTAL		252	252	252	TOTAL		680,290	737,080	795,035
P-5 COMPUTER SCIENTIST	PR	12	12	12					
.3379					SUBTOTAL	PR	512,490	558,730	648,060
P-4 PROGRAMMER ANALYST	PR	12	12	12	PERSONNEL-POSTS		443,290	470,880	499,235
.2171					DATA PROCESSING COSTS		69,200	87,850	148,825
P-3 PROGRAMMER ANALYST	PR	24	24	24	SUBTOTAL	WR	167,800	178,350	146,975
.0180 .3180					PERSONNEL-POSTS		62,000	66,200	70,800
P-3 PROGRAMMER ANALYST	WR	12	12	12	DATA PROCESSING COSTS		105,800	112,150	76,175
4.3075									
P-2 DATA PROCESSING OFFICER	PR	12	12	12					
.3313									
P-2 PROGRAMMER ANALYST	PR	12	12	12					
.0262									
P-2 PROGRAMMER ANALYST	WR	12	12	12					
4.3066									
P-1 PROGRAMMER ANALYST	PR	36	36	36					
.3094 .3866 .3867									
G-7 COMPUTER OPERATOR	PR	24	24	24					
.3314 .3628									
G-7 DATA PROCESSING TECHNICIAN	PR	12	12	12					
.3513									
G-5 COMPUTER OPERATOR	PR	24	24	24					
.4167 .4168									
G-5 DATA TRANSCRIBER	PR	36	36	36					
.3201 .3869 .4166									
G-5 SECRETARY	PR	12	12	12					
.3514									
G-4 DATA TRANSCRIBER	PR	12	12	12					
.3202									

AMRO-5470, INTER-AMERICAN INVESTIGATION OF MORTALITY IN CHILDHOOD

Through the Inter-American Investigation of Mortality in Childhood, extensive data have been collected on causes of childhood mortality; on associated nutrition, biologic and socioeconomic factors; and on reproductive histories of mothers of young children. The report, Patterns of Mortality in Childhood, has been published in both English and Spanish, as have numerous articles by the principal investigators and the national collaborators in the various field projects. These reports are being used extensively throughout the Region in planning for maternal and child health and nutrition services and in fostering the improvement of the quality of health statistics data.

At present, analysis of the data on sample households selected to obtain information on living children in the same study areas is continuing, and papers and a report, both on the sample and the comparison with deaths, are being prepared. In the early 1960's, a study was made of adult mortality in selected cities throughout the Region. Development of related research based on the findings of the two studies will be initiated in the period 1978-1980, including an updating of the information in the earlier study.

TOTAL		12	12	24	TOTAL	WR	25,055	24,175	66,050
P-4 STATISTICIAN	WR	-	-	12	PERSONNEL-POSTS		16,955	18,175	53,250
4.4843					PERSONNEL-CONSULTANTS		8,100	6,000	6,800
G-6 CLERK	WR	12	12	12	DUTY TRAVEL		-	-	4,000
4.3268					SUPPLIES AND EQUIPMENT		-	-	2,000
TOTAL		3	2	2					
CONSULTANT MONTHS	WR	3	2	2					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-5474, DEVELOPMENT OF HEALTH CARE RECORDS AND STATISTICS SYSTEMS

The purpose of this project is to provide assistance in the organization of health care records and statistics systems at the institutional and national levels and in evaluating, adapting and developing new techniques as needed. Assistance is also furnished on the organization, conduct and evaluation of training programs for personnel in health care records and statistics. This assistance includes advisory services and the preparation and distribution of training materials.

TOTAL		36	36	36	TOTAL		108,829	113,450	118,830
P-4 MEDICAL RECORDS LIBRARIAN	PR	24	24	24					
.0981 .2061					SUBTOTAL	PR	108,650	113,450	118,830
G-4 SECRETARY	PR	12	12	12					
.2128					PERSONNEL-POSTS		91,150	96,450	101,830
					DUTY TRAVEL		15,000	15,000	15,000
					SUPPLIES AND EQUIPMENT		2,500	2,000	2,000
					SUBTOTAL	PH	179	-	-
					SUPPLIES AND EQUIPMENT		179	-	-

AMRO-5480, REGIONAL SEMINAR ON COMPUTER SCIENCE

The purpose of this project is to provide assistance to ministries of health in planning the use of computers in health services, in both administrative and technical program areas. In regional seminars held at two to three-year intervals the status of computer usage is reviewed, guidelines for a regional program developed, and information disseminated on developments in the computer science field and their potential application.

TOTAL		1	1	1	TOTAL	PR	2,700	13,000	3,400
CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
					SEMINAR COSTS		-	10,000	-

AMRO-5482, CONTINUING EDUCATION FOR STATISTICIANS OF NATIONAL HEALTH SERVICES

Health statistics personnel in the Region have limited access to continuing training programs in their specialty. This project provides for a seminar to be held at which new concepts in health systems will be discussed, together with a review and updating of the knowledge of these personnel on statistical and research methodology.

TOTAL		2	2	2	TOTAL	PR	23,400	24,000	24,800
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SEMINAR COSTS		16,000	16,000	16,000
					SUPPLIES AND EQUIPMENT		2,000	2,000	2,000

AMRO-5500, MANAGEMENT OF HEALTH SERVICES

Difficulties in the areas of management, organization, planning, decision-making, and adequate utilization of present resources continue to be the most fundamental problems confronted by the health services.

Through this project PAHO/WHO provides support, coordinates activities and assists the governments of the Region in overcoming these deficiencies. It also assists in the overall improvement of administration in the health sector of the countries.

TOTAL		24	24	24	TOTAL	PR	81,275	94,755	106,080
P-5 ADMIN. METHODS OFFICER	PR	12	12	12	PERSONNEL-POSTS		59,475	62,955	66,480
.2178					PERSONNEL-CONSULTANTS		10,800	12,000	13,600
G-4 SECRETARY	PR	12	12	12	DUTY TRAVEL		11,000	12,000	12,000
.2179					SEMINAR COSTS		-	7,800	14,000
TOTAL		4	4	4					
CONSULTANT MONTHS	PR	4	4	4					

AMRO-6000, DEVELOPMENT OF HUMAN RESOURCES

This project is designed to promote, coordinate and support the planning of human resources and the training of the professional and technical personnel who will organize and manage health care systems and services. Consequently, it will help to provide a sufficient number of qualified manpower and, at the same time, ensure that appropriate use is made of the manpower that will be used for extending the service coverage.

In the area of planning, these objectives will be achieved through activities providing support to the various health manpower planning processes in the countries, including formal processes that supplement national health plans and the general coordination of training and service institutions. Models for manpower analysis and estimation will be devised and applied, and continuing education activities will be undertaken.

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-6200, MEDICAL EDUCATION

The principal objectives of this project are the institutional development of the integration of teaching and service activities and the implementation of undergraduate and postgraduate teaching-learning activities as a continuous process closely related to the training of professional, technical and auxiliary personnel.

In order to fulfill these objectives, the project promotes the preparation and execution of educational development plans which emphasize interdisciplinary training and the rapid and progressive integration of students into health services and also develops teacher training and teaching methodology programs.

PAHO/WHO will cooperate in this project by coordinating the technical advice generated by the technical and financial support provided by the IDB for developing the professional, intermediate and auxiliary education sectors and will, at the request of the countries, provide technical and financial support for the creation, development or strengthening of training institutions.

TOTAL		36	36	36	TOTAL	PR	105,235	113,595	119,950
P-5 MEDICAL EDUCATOR .0978	PR	12	12	12	PERSONNEL-POSTS		74,535	79,095	83,750
G-5 SECRETARY .0035	PR	12	12	12	PERSONNEL-CONSULTANTS		5,400	9,000	10,200
G-4 SECRETARY .2017	PR	12	12	12	DUTY TRAVEL		7,800	8,000	9,000
					PRINTING AND BINDING		1,000	1,000	1,500
					SEMINAR COSTS		15,000	15,000	15,000
					SUPPLIES AND EQUIPMENT		1,500	1,500	1,500
TOTAL		2	3	3					
CONSULTANT MONTHS	PR	2	3	3					

AMRO-6270, EDUCATION AND RESEARCH IN SOCIAL SCIENCES APPLIED TO HEALTH

The basic objectives of this project are to cooperate with the countries of the Americas in developing research which will make it possible to pinpoint the social factors involved in the occurrence and spread of disease and which facilitate or impede the extension of health services to the population; incorporating social sciences into the training of health personnel; and organizing and developing postgraduate studies in social medicine.

TOTAL		24	24	24	TOTAL	PR	76,235	80,605	85,230
P-5 MEDICAL EDUCATOR .2120	PR	12	12	12	PERSONNEL-POSTS		62,335	65,995	69,730
G-5 SECRETARY .3122	PR	12	12	12	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		6,000	6,000	6,000
					SUPPLIES AND EQUIPMENT		2,500	2,610	2,700
TOTAL		2	2	2					
CONSULTANT MONTHS	PR	2	2	2					

AMRO-6271, WORLD FEDERATION FOR MEDICAL EDUCATION

This project has been established to enable PAHEF to cooperate with the World Federation for Medical Education in the improvement of medical education through the development of a feasibility study for the establishment of a world center for information on medical education and other related projects.

TOTAL	PH	323	-	-
GRANTS		323	-	-

AMRO-6300, NURSING EDUCATION

The purpose of this project is to cooperate with the countries in establishing plans for developing human resources in nursing and obstetrics as required by the national health plans and the increased educational output of personnel training programs.

The specific objectives are to define a nursing personnel policy to provide direction for the teaching and learning processes; to define the functions and levels of training; to train the necessary personnel for fulfilling the goals of extended coverage; to establish criteria for the planning and utilization of nursing personnel; to develop educational programs; and to structure and organize programs for mid-level personnel and auxiliaries. The project will also cooperate in preparing and implementing teaching programs required by the needs which have been identified and by educational trends in nursing.

TOTAL		24	24	24	TOTAL	PR	98,875	106,455	111,500
P-5 NURSE EDUCATOR .0123	PR	12	12	12	PERSONNEL-POSTS		59,475	62,955	66,480
G-4 SECRETARY .0126	PR	12	12	12	PERSONNEL-CONSULTANTS		5,400	9,000	10,200
					DUTY TRAVEL		7,000	7,500	7,500
					SEMINAR COSTS		26,000	26,000	26,000
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,320
TOTAL		2	3	3					
CONSULTANT MONTHS	PR	2	3	3					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-6370, RESEARCH IN NURSING TEACHING

The shortage of qualified nursing instructors in the clinical, educational and research areas, as well as the limited number of programs under way in the Region for the preparation of instructors, are the most serious obstacles to an increase in the production of nursing personnel, the introduction of the necessary changes in the teaching/learning process, and the development of new program models.

The principal purpose of this project is to assist the countries in conducting research on the teaching/learning process and delivery of nursing services in order to improve and/or establish new programs for the training of nursing instructors.

TOTAL	WR	38,970	41,670	42,600
SEMINAR COSTS		4,970	7,670	8,000
SUPPLIES AND EQUIPMENT		15,000	15,000	15,000
TRAINING GRANTS		19,000	19,000	19,000

AMRO-6381, TRAINING OF NURSING AUXILIARIES

The purpose of this project is to improve the training of nursing auxiliaries required by the countries' health care services and health plans by promoting courses within the countries, providing advice on the organization and development of such programs, and providing teaching materials.

TOTAL		24	24	24	TOTAL	WR	84,860	89,110	93,895
P-4 NURSE EDUCATOR 4.0979	WR	12	12	12	PERSONNEL-POSTS		49,460	53,110	57,095
G-4 CLERK-STENOGRAPHER 4.3013	WR	12	12	12	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		9,000	9,000	9,000
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
TOTAL		2	2	2	COURSE COSTS		20,000	20,000	20,000
CONSULTANT MONTHS	WR	2	2	2					

AMRO-6400, SANITARY ENGINEERING EDUCATION

In keeping with the goals established in the Ten-Year Health Plan for the Americas, this project seeks to strengthen sanitary engineering education in schools of engineering and of public health; to establish a continental system of continuing education; and to promote applied research aimed at developing programs related to environmental quality and the effect of the environment on man's health. In the immediate future, plans are to progressively improve postgraduate curricula, to increase the teaching of sanitary engineering, and to organize short courses and seminars.

TOTAL		24	24	24	TOTAL	PR	70,375*	74,955*	79,780*
P-5 SANITARY ENGINEER .1034	PR	12	12	12	PERSONNEL-POSTS		59,475	62,955	66,480
G-4 SECRETARY .3053	PR	12	12	12	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					DUTY TRAVEL		4,500	5,000	5,500
					SUPPLIES AND EQUIPMENT		1,000	1,000	1,000
TOTAL		2	2	2					
CONSULTANT MONTHS	PR	2	2	2					

*SEE SPECIAL FUND FOR HEALTH PROMOTION, PART VI.

AMRO-6500, VETERINARY MEDICINE EDUCATION

The purpose of this project is to contribute to the improvement of veterinary medical education by training professors and administrative personnel in curriculum revision and organization of postgraduate continuing education, thereby improving teaching/learning systems and helping veterinarians to update their knowledge and improve their capacity.

PAHO/WHO will continue to cooperate by providing advice to educational institutions and by planning courses in the various countries.

TOTAL		3	3	3	TOTAL	WR	11,100	12,000	13,200
CONSULTANT MONTHS	WR	3	3	3	PERSONNEL-CONSULTANTS		8,100	9,000	10,200
					SUPPLIES AND EQUIPMENT		3,000	3,000	3,000

AMRO-6570, TRAINING OF ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH ASSISTANTS

A critical shortage of trained veterinary manpower has been repeatedly recognized by Caribbean Governments at meetings of Ministers of Agriculture and Health. Collaborative action was therefore taken by these Governments, UNDP and PAHO/WHO to establish in Guyana a regional center for the education and training of animal health assistants.

The purpose of the project is to optimize the use of scarce veterinary medical resources within the region, to reduce reliance on more expensive extraregional programs for the preparation of animal health personnel, and to train annually 35 animal health assistants at the regional center.

FUND					FUND				
1977 1978 1979					1977 1978 1979				
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					\$ \$ \$				
TOTAL					UNDP 236,500 268,670 272,025				
P-5	PROJECT MANAGER	UNDP	12	12	12	PERSONNEL-POSTS	135,360	148,320	162,360
	4.4410					PERSONNEL-CONSULTANTS	24,500	36,000	40,500
P-4	LECTURER	UNDP	24	24	24	DUTY TRAVEL	5,690	5,400	5,400
	4.4549 4.4550					SUPPLIES AND EQUIPMENT	54,670	58,500	43,815
TOTAL					FELLOWSHIPS 9,240 9,450 9,450				
					MISCELLANEOUS COSTS 7,040 11,000 10,500				
CONSULTANT MONTHS					UNDP 7 9 9				
TOTAL					12 11 9				
FELLOWSHIP MONTHS					UNDP 12 11 9				

AMRO-6580, SEMINARS ON VETERINARY MEDICINE EDUCATION

The purpose of this project is to support and strengthen schools of veterinary medicine by providing advice and special seminars. PAHO/WHO will continue to hold a series of seminars dealing with the training of professors of veterinary medicine in Latin American schools in order to improve teaching/learning concepts and methods at the undergraduate and postgraduate levels. The Latin American Federation of Associations of Veterinary Medicine will cooperate in formulating activities for strengthening existing academic programs and for developing new ones.

TOTAL	WR	9,500	14,000	15,000
SEMINAR COSTS		9,500	14,000	15,000

AMRO-6600, DENTAL EDUCATION

This project has as its primary objectives cooperation with the faculties of dentistry in Latin America in the revision of their curricula; assistance in the designing of adequate facilities and appropriate administrative structures; establishment of new faculties of dentistry where necessary; development of continuing education programs; and preparation of the necessary personnel in specific aspects of education, with appropriate teaching materials to improve the quality and accessibility of dental education in Latin America.

TOTAL		2	2	2	TOTAL	PR	6,600x	7,400x	8,200x
CONSULTANT MONTHS	PR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800
					SUPPLIES AND EQUIPMENT		1,200	1,400	1,400

*SEE SPECIAL FUND FOR HEALTH PROMOTION, PART VI.

AMRO-6601, INNOVATIONS IN DENTAL EDUCATION

There are several country programs for improving dental education and dental care delivery supported by grants from the W. K. Kellogg Foundation to university dental schools. The objective of this project is to provide a coordinating mechanism for interchange of experience and information and for dissemination of information and advice on educational technology. This project is financed from funds granted to PAHEF by the W. K. Kellogg Foundation.

TOTAL		11	12	12	TOTAL	PH	85,600	85,600	85,600
G-4 SECRETARY	PH	11	12	12	PERSONNEL-POSTS		4,800	4,800	4,800
.4934					PERSONNEL-CONSULTANTS		7,200	7,200	7,200
TOTAL		2	2	2	DUTY TRAVEL		6,000	6,000	6,000
					SEMINAR COSTS		21,600	23,600	23,600
CONSULTANT MONTHS	PH	2	2	2	SUPPLIES AND EQUIPMENT		20,000	20,000	20,000
					GRANTS		21,000	21,000	21,000
					COMMON SERVICES		3,000	3,000	3,000

AMRO-6670, TRAINING OF AUXILIARY DENTAL PERSONNEL

The purposes of this project are to establish a coordination mechanism for providing information concerning the role of the auxiliaries in dentistry; to improve training programs; and to develop the necessary educational materials. Attempts will be made to cooperate in establishing institutions and programs and in training instructors for the establishment of regional training programs.

TOTAL		2	2	2	TOTAL	WR	5,400	6,000	6,800
CONSULTANT MONTHS	WR	2	2	2	PERSONNEL-CONSULTANTS		5,400	6,000	6,800

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

AMRO-6700, TEACHING OF STATISTICS IN MEDICAL SCHOOLS

This project is intended to encourage the training of educational personnel and professionals and the preparation of post-graduate curricula and short courses in statistical methods principally for scientific research in order to ensure optimum use of statistics in research and daily epidemiological and clinical work.

TOTAL		1	1	1	TOTAL	PR	2,700	3,000	3,400
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CONSULTANT MONTHS	PR	1	1	1	PERSONNEL-CONSULTANTS		2,700	3,000	3,400

AMRO-7300, PRODUCTION AND QUALITY CONTROL OF BIOLOGICALS

The objectives of this project are to expand the production and improve the quality of biological products so that the Region can become self-sufficient in vaccines and antisera that meet international (WHO) standards; and to encourage Member Countries to establish effective national policies for the use of blood and blood products, based on a voluntary donor non-profit system.

TOTAL		24	24	24	TOTAL		67,060	72,340	76,970
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P-5 LABORATORY ADVISER 4.3852	WR	12	12	12	SUBTOTAL	PR	15,060	16,140	17,270
G-5 SECRETARY .3025	PR	12	12	12	-----		-----	-----	-----
					PERSONNEL-POSTS		15,060	16,140	17,270
					SUBTOTAL	WR	52,000	56,200	59,700
					-----		-----	-----	-----
					PERSONNEL-POSTS DUTY TRAVEL		44,000 8,000	47,200 9,000	50,700 9,000

AMRO-7301, REGIONAL REFERENCE LABORATORY FOR THE PRODUCTION AND CONTROL OF VIRAL VACCINES

The Ten-Year Health Plan for the Americas specifically requires PAHO/WHO to establish programs that will lead to the improvement and expansion of laboratories that manufacture biological products, the ultimate goal being to satisfy present and future national and multinational needs for the control of measles, whooping cough, tetanus, diphtheria, poliomyelitis, and smallpox. The goal for smallpox has already been achieved, but that is far from the case for the other five diseases.

WHO's Expanded Program for Immunization (EPI), which received the unanimous approval of all of WHO's Member Governments, has added importance to attaining this goal. The EPI, a logical follow-up of the world-wide smallpox eradication program, calls for the elimination of six immunizable diseases--diphtheria, tetanus, whooping cough, tuberculosis, measles, and poliomyelitis.

Since the promulgation of the 1972 Ten-Year Health Plan for the Americas, the greatest emphasis in PAHO/WHO programs has been given to the improvement of quality control procedures. At the same time, the need for improving and expanding conditions for manufacture has been stressed.

While a number of countries produce adequate amounts of BCG vaccine, none of them produce sufficient amounts of the other vaccine for their own use. One of the greatest handicaps to date to improving production and control procedures in Latin America has been the fact that all potential trainees had to have an adequate capability in English, since all advanced training in production and control has to be taken in English-speaking countries. This has severely limited the number of qualified candidates. The establishment of a PAHO/WHO Reference Center in Latin America, where such training could be obtained, would greatly facilitate progress in this difficult field.

Regarding viral vaccines, Mexico's Instituto Nacional de Virologia has the capability for producing polio vaccine and the potential to produce measles vaccines. Most important, the internal controls at this Institute are well advanced and of a high order, and it could serve extremely well as a training center for the control of viral vaccines.

Given the proper support, the facility in Mexico could be developed to a point where it could serve as an effective PAHO/WHO Reference Center for Training in the Production and Control of Viral Vaccines. Such a center could also be utilized for testing of vaccines either produced or purchased by other countries in the Region. Additionally, this extra support could enable and encourage increased vaccine production in Mexico so that the country could not only become self-sufficient but could also provide a surplus of vaccines of good quality for other countries of the Region.

TOTAL		-	6	4	TOTAL	PR	-	45,390	34,720
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CONSULTANT MONTHS	PR	-	6	4	PERSONNEL-CONSULTANTS		-	18,000	13,600
					SUPPLIES AND EQUIPMENT		-	15,000	15,000
TOTAL		-	14	6	FELLOWSHIPS		-	12,390	6,120
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FELLOWSHIP MONTHS	PR	-	14	6					

AMRO-7400, HEALTH FACILITIES MAINTENANCE AND ENGINEERING

The purposes of this project are the development of engineering and maintenance systems for health facilities and training of technicians in this field; the development of and coordination with UNDP, IDB, World Bank, AID and CIDA of technical assistance projects; and the development of and coordination with training institutions in the Region of the Americas, in reference to curriculum development, teacher development and systems engineering.

FUND					FUND				
1977 1978 1979					1977 1978 1979				
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FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

associated bibliographical material that are both of excellent quality and up to date, so that students may study on their own and the majority of theoretical classes can be eliminated. In Latin America there were few opportunities for students to acquire such textbooks before PAHO/WHO undertook this project, which began in 1969 with four titles and currently covers 22 titles in Spanish and Portuguese and serves more than 150,000 students of medicine in 174 schools, and 30,000 students of nursing in 116 schools.

Its objectives are (1) to expand coverage in terms of both titles and students; (2) to provide the program with advisory services in selecting books on the integration of curricula and on work/study; (3) to form eight committees (two each year) on textbooks for teaching internal medicine and special fields, morphological sciences, technical personnel, surgery and special fields, community medicine, pathology, an integrated approach to microbiology and parasitology, and medico-surgical and morpho-functional problems; (4) to promote the production of textbooks or handbooks for the teaching of technical personnel; (5) to increase the production of Portuguese texts of books described in the program; (6) to encourage new translations into Spanish and Portuguese of books not yet incorporated in the program; and (7) to encourage the production by Latin American writers of textbooks geared to the Latin American situation.

TOTAL		96	96	96	TOTAL	1,687,670	1,908,555	2,133,660
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P-4 ADMINISTRATIVE OFFICER .4055	PH	12	12	12	SUBTOTAL	PR 100,000*	100,000*	100,000*
P-2 ADMINISTRATIVE OFFICER .3404	PH	12	12	12	-----	-----	-----	-----
G-8 ADMINISTRATIVE ASSISTANT .3349	PH	12	12	12	MISCELLANEOUS COSTS	100,000	100,000	100,000
G-7 ADMINISTRATIVE ASSISTANT .3772	PH	12	12	12	SUBTOTAL	PH 1,587,670	1,808,555	2,033,660
G-6 CLERK .3771	PH	12	12	12	-----	-----	-----	-----
G-5 CLERK .4681	PH	12	12	12	PERSONNEL-POSTS	160,050	176,055	193,660
G-5 SECRETARY .3168	PH	12	12	12	PERSONNEL-CONSULTANTS	5,000	5,500	6,000
G-4 CLERK .4682	PH	12	12	12	DUTY TRAVEL	9,000	10,000	11,000
					CONTRACTUAL SERVICES	17,000	7,000	8,000
					PRINTING AND BINDING	1,292,250	1,500,000	1,700,000
					SUPPLIES AND EQUIPMENT	104,370	110,000	115,000
TOTAL		2	2	2				
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CONSULTANT MONTHS	PH	2	2	2				

*SEE SPECIAL FUND FOR HEALTH PROMOTION, PART VI.

AMRO-8300, NURSING TEXTBOOKS

One of the targets of the Ten-Year-Health Plan for the Americas is to provide textbooks of high scientific and instructional quality for students of medicine, nursing and other disciplines through programs that will cover 75% of the students by 1980.

In the Latin American countries there are approximately 275 nursing schools, 14 schools for midwives, 60 courses in nursing techniques and 50 postbasic courses, representing a total student population estimated at 40,000.

The shortage of textbooks in Spanish and Portuguese and the high cost of the few that exist are two of the most serious problems encountered in endeavors to improve the teaching and learning processes.

The purpose of the present project is to ensure the effective conduct of the Nursing Textbooks Program, provide it with the technical advisory services essential for the selection of those texts best adapted to the needs of curricular integration, and to promote the use of such textbooks so as to achieve the desired coverages both in terms of the range of subject matter and the number of schools.

TOTAL		4	4	4	TOTAL	PH 188,000	235,000	292,000
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CONSULTANT MONTHS	PH	4	4	4	PERSONNEL-POSTS	10,000	12,000	14,000
					PERSONNEL-CONSULTANTS	10,000	12,000	14,000
					DUTY TRAVEL	3,000	3,500	4,000
					PRINTING AND BINDING	160,000	200,000	250,000
					FREIGHT & INSURANCE	3,000	5,000	7,000
					SUPPLIES AND EQUIPMENT	2,000	2,500	3,000

AMRO-8400, PURCHASE OF EQUIPMENT FOR VETERINARY MEDICINE EDUCATION

The purpose of this project is to cooperate in improving veterinary education in Latin America through provision of microscopes for scientific and educational purposes.

TOTAL	PH 6,567	-	-
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SUPPLIES AND EQUIPMENT	6,567	-	-

AMRO-8500, REGIONAL LIBRARIES

This project provides library services for the Bureau and reference services for its consultants.

TOTAL		72	72	72	TOTAL	151,415	160,395	169,755
P-4	LIBRARIAN .0142	PR	12	12	12			
P-3	LIBRARIAN 4.0143	WR	12	12	12	SUBTOTAL	PR 110,415	117,295 134,355
P-2	LIBRARIAN .0144	PR	12	12	12	PERSONNEL-POSTS	110,415	117,295 124,355
G-5	CLERK .0145 .0146	PR	24	24	24	LIBRARY ACQUISITIONS	-	- 10,000
G-4	CLERK .0147	PR	12	12	12	SUBTOTAL	WR 41,000	43,100 35,400
						PERSONNEL-POSTS	31,000	33,100 35,400
						LIBRARY ACQUISITIONS	10,000	10,000 -

AMRO-8570, REGIONAL LIBRARY OF MEDICINE AND THE HEALTH SCIENCES

The purposes of this project are to provide the scientific information required by health science professionals working in the countries of the Region; to increase bibliographic holdings and to improve relations between BIREME and other similar centers so that no request for information or documents will remain unattended; to cooperate with the libraries of the Cooperative Network of Biomedical Libraries so that its bibliographic collections, personnel and equipment are adequate; to facilitate technical training for personnel working in biomedical libraries in the countries of the Region; to continue activities for implementing the Audiovisual Unit which will provide services for the medical schools in the Region; and to incorporate Latin American medical literature into the BIREME/MEDLINE data bank.

TOTAL			72	72	72	TOTAL		979,492	631,850	646,020
P-5 DIRECTOR .3175	PR		12	12	12	SUBTOTAL	PR	199,995	213,800	225,640
P-4 ADMINISTRATIVE OFFICER .4601	PR		12	12	12					
P-4 CHIEF OF REGIONAL SERVICES 4.3464	WR		12	12	12	PERSONNEL-POSTS		183,465	193,685	204,050
P-4 TRAINING OFFICER .3927	PR		12	12	12	PERSONNEL-CONSULTANTS		2,700	3,000	3,400
P-2 CHIEF OF REFERENCE SERVICES .3466	PR		12	12	12	DUTY TRAVEL		4,000	5,500	6,000
P-2 CHIEF OF TECHNICAL SERVICES .3465	PR		12	12	12	SEMINAR COSTS		9,630	11,415	11,990
						HOSPITALITY		200	200	200
						SUBTOTAL	PG	723,497	348,500	348,500
TOTAL			1	1	1					
CONSULTANT MONTHS	PR		1	1	1	DUTY TRAVEL		2,176	-	-
						CONTRACTUAL SERVICES		82,974	38,198	38,198
TOTAL			-	10	9	SUPPLIES AND EQUIPMENT		234,099	6,000	6,000
FELLOWSHIP MONTHS	WR		-	10	9	LIBRARY ACQUISITIONS		121,262	116,000	116,000
						LOCAL PERSONNEL COSTS		241,927	-	-
						COMMON SERVICES		41,059	188,302	188,302
						SUBTOTAL	WR	56,000	69,550	71,980
						PERSONNEL-POSTS		43,000	46,200	49,700
						DUTY TRAVEL		1,000	2,500	3,000
						FELLOWSHIPS		-	8,850	9,180
						COURSE COSTS		12,000	12,000	10,000

AMRO-8600, PUBLICATIONS

The publications program of PAHO is carried out with a view to providing support for collaborative activities undertaken with the governments in this Region. There is the monthly technical journal, the Boletín de la Oficina Sanitaria Panamericana, the quarterly English edition of the Bulletin of the Pan American Health Organization, and the quarterly journal Educación Médica y Salud, in addition to an extensive series of scientific publications and official documents.

Visual aids and filmstrips are also prepared and circulated.

TOTAL		396	396	396	TOTAL	1,020,410	1,075,785	1,168,410
P-5	EDITOR .4118	PR	12	12	12			
P-4	EDITOR .0127	PR	12	12	12			
P-3	EDITOR .0128 .0129 .3647 .3762 .4647	PK	60	60	60			
P-3	EDITOR 4.0133	WR	12	12	12			
P-3	TRANSLATOR .0210	PR	12	12	12			
P-3	VISUAL MEDIA OFFICER .0150 .0153	PR	24	24	24			
P-2	ADMINISTRATIVE OFFICER .2057	PR	12	12	12			
P-2	EDITOR .0022 .0136 .3494	PR	36	36	36			
P-1	EDITOR .0130	PR	12	12	12			
G-8	CLERK 4.0135 4.0215	WR	24	24	24			
G-8	VISUAL MEDIA TECHNICIAN .0152 .0155 .3705	PR	36	36	36			
G-7	ADMINISTRATIVE TECHNICIAN .2115	PR	12	12	12			
SUBTOTAL						PR	863,055	908,885
PERSONNEL-POSTS							667,805	708,885
VISUAL AIDS							13,500	14,500
BULLETIN							116,000	117,000
SPECIAL PUBLICATIONS							42,000	43,000
MEDICAL EDUCATION JOURN.							23,750	25,500
SUBTOTAL						WR	157,355	166,900
PERSONNEL-POSTS							107,355	114,900
VISUAL AIDS							8,000	9,000
SPECIAL PUBLICATIONS							42,000	43,000

	FUND	1977	1978	1979
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P-1 ADMINISTRATIVE OFFICER .3632	PR	12	12	12
G-5 SECRETARY .0030	PR	12	12	12
G-4 CLERK-TYPIST .2066	PR	12	12	12
TOTAL		2	3	3
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CONSULTANT MONTHS	PR	2	3	3

FUND	1977	1978	1979
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	\$	\$	\$

AMRO-8901, PAHO RESEARCH GRANT PROGRAM

This program provides support for research projects and exchange of research workers. The Organization gives preference to projects that attempt to solve problems of special importance for Latin America, and to applicants who are nationals of PAHO's Member or Participating Governments. The scientific merit of the proposed research is evaluated by appropriate technical divisions at PAHO and by at least three outside referees chosen from high-level scientific panels. The sums awarded are modest, intended mainly to complement much larger financial efforts made by the grantees' own institution or laboratory. PAHO's contribution, however, is considered critical because in most cases it covers items or activities that are indispensable for carrying out the project but which are not available locally or easily funded from other sources.

The grants for exchange of research workers are designed to help investigators pay short visits to colleagues working in similar or related fields in other countries or laboratories to exchange views, acquire new techniques, and discuss problems in their research or in the interpretation of their results.

TOTAL	PR	100,000	100,000	100,000
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GRANTS		100,000	100,000	100,000

TECHNICAL AND ADMINISTRATIVE DIRECTION
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	216,910	3.2	229,560	3.1	243,145	3.1
=====	=====	=====	=====	=====	=====	=====
SERVICES TO INDIVIDUALS	152,850	2.3	161,220	2.2	169,750	2.2
-----	-----	-----	-----	-----	-----	-----
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES	152,850	2.3	161,220	2.2	169,750	2.2
-----	-----	-----	-----	-----	-----	-----
ENVIRONMENTAL HEALTH SERVICES	64,060	.9	68,340	.9	73,395	.9
-----	-----	-----	-----	-----	-----	-----
II. DEVELOPMENT OF THE INFRASTRUCTURE	264,985	3.9	304,095	4.2	326,055	4.1
=====	=====	=====	=====	=====	=====	=====
HEALTH SYSTEMS	121,300	1.8	150,450	2.1	160,345	2.0
-----	-----	-----	-----	-----	-----	-----
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	121,300	1.8	150,450	2.1	160,345	2.0
5200 MEDICAL CARE SYSTEMS	-	-	-	-	-	-
-----	-----	-----	-----	-----	-----	-----
DEVELOPMENT OF HUMAN RESOURCES	66,455	1.0	70,875	1.0	77,150	1.0
-----	-----	-----	-----	-----	-----	-----
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	66,455	1.0	70,875	1.0	77,150	1.0
-----	-----	-----	-----	-----	-----	-----
TECHNOLOGICAL RESOURCES	77,230	1.1	82,770	1.1	88,560	1.1
-----	-----	-----	-----	-----	-----	-----
8600 EDITORIAL SERVICES	77,230	1.1	82,770	1.1	88,560	1.1
-----	-----	-----	-----	-----	-----	-----
III. ADMINISTRATIVE DIRECTION	6,265,010	92.9	6,678,910	92.7	7,285,195	92.8
=====	=====	=====	=====	=====	=====	=====
9100 EXECUTIVE AND TECHNICAL DIRECTION	643,875	9.5	755,435	10.5	875,895	11.2
9200 PROGRAM SERVICES	462,870	6.9	492,500	6.8	523,435	6.7
9300 ADMINISTRATIVE SERVICES	3,499,620	51.9	3,748,750	52.1	4,119,155	52.4
9400 GENERAL EXPENSES	1,658,645	24.6	1,682,225	23.3	1,766,710	22.5
-----	-----	-----	-----	-----	-----	-----
GRAND TOTAL	6,746,905	100.0	7,212,565	100.0	7,854,395	100.0
=====	=====	=====	=====	=====	=====	=====

*LESS THAN .05 PERCENT

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

TECHNICAL AND ADMINISTRATIVE DIRECTION - DETAIL

Office of the Director

The Office of the Director is responsible for the operation of the Pan American Sanitary Bureau and the Regional Office for the Americas of the World Health Organization.

TOTAL		180	216	216	TOTAL	499,310	603,415	716,200
UG1 DIRECTOR	PR	12	12	12	SUBTOTAL	PR	420,670	523,270
UG2 DEPUTY DIRECTOR	PR	12	12	12				
UG3 ASSISTANT DIRECTOR	PR	12	12	12	PERSONNEL-POSTS	400,120	498,380	608,765
P-6 HEALTH PROGRAM ANALYST	PR	12	12	12	REPRESENTATION ALLOWANCE	3,400	3,400	3,400
P-5 PROGRAM OFFICER	PR	-	12	12	DUTY TRAVEL	14,650	18,990	20,020
P-4 HEALTH PROGRAM ANALYST	PR	24	36	36	HOSPITALITY	2,500	2,500	2,500
P-1 ADMINISTRATIVE OFFICER	PR	12	12	12	SUBTOTAL	WR	78,640	80,145
P-1 EDITOR	PR	12	12	12				
G-8 ADMINISTRATIVE ASSISTANT	PR	-	12	12	PERSONNEL-POSTS	63,590	65,435	67,335
G-8 CLERK	PR	12	12	12	REPRESENTATION ALLOWANCE	2,600	2,600	2,600
G-8 SECRETARY	PR	36	36	36	DUTY TRAVEL	9,950	9,610	9,080
G-7 SECRETARY	PR	12	12	12	HOSPITALITY	2,500	2,500	2,500
G-5 CLERK	PR	12	12	12				
G-4 CLERK	PR	12	12	12				

Divisions

The technical staff of the Bureau serve in direct response to resolutions and guidelines for activities adopted by the Governing Bodies. In order to emphasize and clarify the role of the staff, six technical divisions and one administrative office have been created from existing departments. Except for the technical direction to be provided by the Chief of each division, the technical staff has been assigned to regional projects with goals and objectives authorized by the Governing Bodies. The program areas have been assigned to the divisions for supervision and coordination.

The functions common to all divisions are (1) responsibility for the planning, programming, evaluation and analysis of the program activities assigned to the division; (2) participation in the preparation, review and evaluation of the overall PAHO program of technical cooperation; (3) participation in the formulation of policy, technical criteria, standards and guidelines for use in program development and program/project implementation; and (4) provision of technical advice and assistance to country representatives on program development and implementation, to include discussions with government officials when requested by the country representative.

The divisions have been established to (1) exercise supervision over the programs, functions and staff assigned to the division; (2) maintain liaison with counterparts in other organizations to ensure that PAHO program activities are coordinated and responsive to the latest developments in technology, expertise and socioeconomic impacts on health; and (3) stimulate, organize and coordinate training and research in the program activities under their supervision; and maintain close collaboration in these areas with research institutes and laboratories.

The major program functions of the Divisions are:

Division of Disease Control - (1) communicable diseases control; (2) human and animal health; (3) malaria and parasitic diseases control and eradication; (4) non-communicable diseases control; (5) health laboratory services; (6) food and drug control; (7) vector biology and control; (8) epidemiological surveillance; (9) emergency preparedness and disaster relief coordination.

Division of Environmental Health - (1) water supply and wastewater disposal; (2) water resource development; (3) solid waste disposal; (4) environmental pollution; (5) occupational health; (6) housing sanitation; (7) food sanitation; (8) pesticides; (9) radiation protection; (10) accident prevention; (11) noise abatement.

Division of Family Health - (1) maternal and child health; (2) family planning and population dynamics; (3) nutrition; (4) mental health; (5) dental health; (6) health education.

Division of Health Services - (1) development and operation of the management of health systems; (2) delivery of safe and effective health care to all the population; (3) community involvement in all stages of development and operation of their health services.

Division of Human Resources and Research - (1) educational technology development in the health field; (2) institutional and program development; (3) faculty development and training; (4) continuing education; (5) health manpower planning and methodology; (6) administration of the fellowship program; (7) health and biomedical information; (8) research development and coordination.

Division of Supporting Services - (1) development of health statistical systems; (2) dissemination of statistical information; (3) development of internal long-term planning and evaluation; (4) internal reporting system; (5) agreements and legal services.

Division of Administration - (1) administrative management; (2) budget and finance; (3) computer services; (4) conference and general services; (5) publications; (6) supply services; (7) personnel; (8) PAHO library.

FUND				1977	1978	1979	FUND				1977	1978	1979
-----				-----	-----	-----	-----				-----	-----	-----
				\$							\$		
TOTAL				180	180	180	TOTAL				551,730	605,405	642,835
-----				-----	-----	-----	-----				-----	-----	-----
D-2	CHIEF OF ADMINISTRATION	PR	12	12	12		SUBTOTAL	PR	379,840	400,850	422,320		
	.0156						-----	-----	-----	-----	-----		
U-1	CHIEF, DIV. DISEASE CONTROL	PR	12	12	12		PERSONNEL-POSTS		295,040	312,935	331,185		
	.1039						DUTY TRAVEL		31,000	32,000	33,000		
D-1	CHIEF, DIV. ENVIRONM. HLTH.	WR	12	12	12		EXTERNAL AUDIT COSTS		11,500	11,500	11,500		
	4.0047						INTERNAL AUDIT COSTS		42,300	44,415	46,635		
D-1	CHIEF, DIV. FAMILY HEALTH	PR	12	12	12		SUBTOTAL	WR	171,890	204,555	220,515		
	.3537						-----	-----	-----	-----	-----		
D-1	CHIEF, DIV. HLTH. SERVICES	PR	12	12	12		PERSONNEL-POSTS		159,390	192,055	206,090		
	.3140						DUTY TRAVEL		12,500	12,500	14,425		
D-1	CHIEF, DIV. HUMAN RESOURCES	WR	12	12	12								
	4.0033												
D-1	CHIEF, DIV. SUPPORTING SVC.	WR	12	12	12								
	4.4755												
G-7	SECRETARY	PR	12	12	12								
	.0157												
G-6	SECRETARY	PR	36	36	36								
	.0042 .3179 .3877												
G-6	SECRETARY	WR	12	12	12								
	4.0034												
G-5	SECRETARY	PR	12	12	12								
	.0148												
G-5	SECRETARY	WR	24	24	24								
	4.4396 4.4756												

Program Services

Program services are not distributed into specific programs since they are in support of all the technical programs. These services have, therefore, been grouped under this category to facilitate review and administration. The functions and costs involved are those related to project agreements and reporting, liaison with other international organizations, and public information activities.

TOTAL				60	60	60	TOTAL				125,790	134,370	143,380
-----				-----	-----	-----	-----				-----	-----	-----
D-2	MEDICAL OFFICER	PR	12	12	12		SUBTOTAL	PR	64,230	68,030	71,910		
	.4071						-----	-----	-----	-----	-----		
P-5	MEDICAL OFFICER	PR	12	12	12		PERSONNEL-POSTS		64,230	68,030	71,910		
	.3468						SUBTOTAL	WR	61,560	66,340	71,470		
P-5	MEDICAL OFFICER	WR	12	12	12		-----	-----	-----	-----	-----		
	4.4362						PERSONNEL-POSTS		59,060	63,340	67,970		
G-6	CLERK	PR	12	12	12		DUTY TRAVEL		2,500	3,000	3,500		
	.0218												
G-5	SECRETARY	WR	12	12	12								
	4.4399												

Public Relations

TOTAL				48	48	48	TOTAL				187,105	199,455	212,505
-----				-----	-----	-----	-----				-----	-----	-----
P-4	INFORMATION OFFICER	WR	12	12	12		SUBTOTAL	PR	105,180	111,880	118,930		
	4.0013						-----	-----	-----	-----	-----		
P-2	EDITOR	PR	12	12	12		PERSONNEL-POSTS		55,880	59,480	63,180		
	.0016						PAN AMERICAN HEALTH		29,375	31,225	33,250		
G-5	CLERK	PR	12	12	12		PUBLIC INFORMATION		19,925	21,175	22,500		
	.3329						SUBTOTAL	WR	81,925	87,575	93,575		
G-4	CLERK	PR	12	12	12		-----	-----	-----	-----	-----		
	.4649						PERSONNEL-POSTS		44,000	47,200	50,700		
							DUTY TRAVEL		1,750	1,750	1,750		
							PUBLIC INFORMATION		19,925	21,175	22,500		
							WORLD HEALTH DAY		16,250	17,450	18,625		

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

Reports and Agreements

TOTAL		72	72	72	TOTAL	PR	149,975	158,675	167,550
P-5 MEDICAL OFFICER .0010	PR	12	12	12	PERSONNEL-POSTS		143,975	152,675	161,550
P-2 ADMINISTRATIVE OFFICER .4202	PR	12	12	12	DUTY TRAVEL		6,000	6,000	6,000
P-2 EDITOR .3061	PR	12	12	12					
G-5 SECRETARY .1071	PR	12	12	12					
G-4 CLERK .3635	PR	12	12	12					
G-4 SECRETARY .0011	PR	12	12	12					

Administrative Services

Management and Computer Services

This Department has responsibilities in three areas: 1) Administrative Analysis: management surveys; directives and procedures, staffing analysis; management advisory services and assistance; delegations of authority; PAHO Management Review Program; 2) Computer Services: computer support services for administrative and technical work; advisory services to Member Governments and PAHO activities; and 3) PAHO Library: operation of PAHO Library; technical assistance to field office libraries.

TOTAL		108	108	96	TOTAL		187,920	199,555	238,315
P-5 CHIEF, MGMT. & COMPUTER SVC .3344	PR	12	12	12	SUBTOTAL	PR	175,720	186,455	224,295
G-6 SECRETARY .4856	PR	12	12	12	PERSONNEL-POSTS		166,720	176,705	213,795
ADMINISTRATIVE ANALYSIS					DUTY TRAVEL		9,000	9,750	10,500
U-G MANAGEMENT OFFICER .4802	PR	12	12	-	SUBTOTAL	WR	12,200	13,100	14,020
P-4 MANAGEMENT OFFICER .4500	PR	12	12	12	PERSONNEL-POSTS		12,200	13,100	14,020
P-2 MANAGEMENT OFFICER .0231	PR	12	12	12					
P-1 ADMINISTRATIVE OFFICER .3405	PR	12	12	12					
G-7 ADMINISTRATIVE TECHNICIAN .0197	PR	12	12	12					
G-5 SECRETARY .3181	PR	12	12	12					
G-4 CLERK 4.0236	WR	12	12	12					

Budget and Finance

This Office is responsible for budgetary policies and procedures; budget development and execution; financial and accounting policies, rules and procedures; controlling, disbursing and reporting on funds of the Organization, and PAHO Textbook Program.

TOTAL		816	816	816	TOTAL		1,532,825	1,640,770	1,778,830
P-6 CHIEF OF BUDGET AND FINANCE .0158	PR	12	12	12	SUBTOTAL	PR	1,176,545	1,259,360	1,370,580
P-4 SYSTEMS ANALYST .4662	PR	12	12	12	PERSONNEL-POSTS		1,170,545	1,252,860	1,363,580
G-6 SECRETARY .0155	PR	12	12	12	DUTY TRAVEL		6,000	6,500	7,000
BUDGET					SUBTOTAL	WR	356,280	381,410	408,250
P-5 BUDGET OFFICER .0160	PR	12	12	12	PERSONNEL-POSTS		356,280	381,410	408,250
P-4 BUDGET OFFICER .0161	PR	12	12	12					
P-3 BUDGET OFFICER .0164 .3090	PR	24	24	24					
P-2 BUDGET OFFICER 4.0162 4.0163	WR	24	24	24					
G-8 BUDGET TECHNICIAN .4535	PR	12	12	12					
G-6 BUDGET CLERK .0165	PR	12	12	12					
G-6 CLERK 4.0166	WR	12	12	12					
G-5 CLERK .4260	PR	12	12	12					

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

Procurement

This Office is responsible for the procurement and shipment of supplies and equipment for the operating program and purchases for Member Countries and on behalf of WHO.

TOTAL		240	246	252	TOTAL	446,870	486,515	529,360
P-4 CHIEF OF PROCUREMENT	PR	12	12	12				
.0219					SUBTOTAL	PR 323,675	343,725	364,810
P-3 PROCUREMENT OFFICER	PR	12	12	12				
.0235								
P-3 PROCUREMENT OFFICER	WR	12	12	12	PERSONNEL-POSTS	318,675	338,725	356,810
4.0238					DUTY TRAVEL	5,000	5,000	5,000
P-2 PROCUREMENT OFFICER	PR	24	24	24	SUBTOTAL	WR 123,195	142,790	164,550
.0204 .4486								
P-2 PROCUREMENT OFFICER	WR	24	24	24				
4.0241 4.0242					PERSONNEL-POSTS	123,195	142,790	164,550
P-2 TRANSLATOR	PR	12	6	-				
.0240								
P-1 PROCUREMENT OFFICER	PR	36	36	36				
.4918 .4915 .4920								
G-6 CLERK	PR	-	6	12				
.4865								
G-6 CLERK	WR	36	36	36				
4.0245 4.0249 4.3315								
G-5 CLERK	PR	48	48	48				
.0248 .2083 .2084 .4208								
G-5 SECRETARY	PR	12	12	12				
.2082								
G-4 CLERK	PR	12	18	24				
.4792 .4866								

Other Personnel Costs

The estimate for this section represents the continuation of the need for temporary personnel to replace staff on extended sick or maternity leave and to meet short-term workload requirements for which it would be uneconomical to maintain full-time staff. Provision is also made for training and maintaining staff current in their field of expertise and for staff relations.

TOTAL	77,600	82,295	87,110
SUBTOTAL	PR 65,000	68,625	72,380
TEMPORARY PERSONNEL	7,500	7,500	7,500
STAFF DEVELOPMENT	52,500	55,125	57,880
STAFF RELATIONS	5,000	6,000	7,000
SUBTOTAL	WR 12,600	13,670	14,730
TEMPORARY PERSONNEL	12,600	13,670	14,730

Common Services- Headquarters

The estimates for the various common services for the Washington Office are shown by major expense items in the schedules. Costs are apportioned on a pro rata basis between funds budgeted under PAHO and WHO, except for office equipment, which is charged directly to the appropriate source of funds.

TOTAL	1,656,145	1,679,725	1,764,210
SUBTOTAL	PR 1,105,565	1,034,560	1,149,790
CONTRACTUAL SERVICES	113,430	73,970	79,420
PREMISES RENTAL & MAINT.	448,245	426,945	502,540
BLDG. REPAIR & REPLACMT.	25,000	25,000	25,000
EQUIP. RENTAL AND MAINT.	66,900	70,245	73,760
COMMUNICATIONS	262,265	239,945	251,940
FREIGHT & INSURANCE	48,180	50,590	53,120
SUPPLIES AND EQUIPMENT	91,390	96,480	101,300
EQUIPMENT	49,655	51,385	62,710
SUBTOTAL	WR 550,580	645,165	614,420
CONTRACTUAL SERVICES	86,470	75,725	79,510
PREMISES RENTAL & MAINT.	160,725	215,975	172,520
EQUIP. RENTAL AND MAINT.	40,490	48,815	51,255
COMMUNICATIONS	125,055	166,740	175,080
FREIGHT & INSURANCE	33,480	35,155	36,915
SUPPLIES AND EQUIPMENT	63,850	67,045	70,400
EQUIPMENT	34,510	35,710	28,740

PART IV. GOVERNING BODIES

GOVERNING BODIES

PROGRAM BUDGET

[illegible]

*LESS THAN .05 PERCENT

GOVERNING BODIES
SUMMARY OF INVESTMENT

[illegible]

FUND 1977 1978 1979

FUND 1977 1978 1979

\$ \$ \$

GOVERNING BODIES - DETAIL

Conference and Translation Section

Included in this section are the estimates for the costs of meeting services.

TOTAL		168	168	168	TOTAL		305,520	338,100	394,830
-----		-----	-----	-----	-----		-----	-----	-----
CONFERENCE SERVICES					SUBTOTAL	PR	201,185	226,335	260,030
-----					-----	-----	-----	-----	-----
P-4 CONFERENCE OFFICER .0201	PR	12	12	12	PERSONNEL-POSTS		201,185	226,335	260,030
P-3 CONFERENCE OFFICER .3539	PR	12	12	12	SUBTOTAL	WR	104,335	111,765	136,800
P-2 CONFERENCE OFFICER .0202	PR	12	12	12	-----	-----	-----	-----	-----
G-8 ADMINISTRATIVE TECHNICIAN .0205	PR	12	12	12	PERSONNEL-POSTS		104,335	111,765	136,800
G-7 ADMINISTRATIVE TECHNICIAN .2169	PR	12	12	12					
G-7 CLERK .0206	PR	12	12	12					
G-4 SECRETARY .0203	PR	12	12	12					
TRANSLATION SERVICES									

P-4 TRANSLATOR-REVISER 4.0209 4.0212	WR	24	24	24					
P-3 TRANSLATOR-REVISER 4.0018	WR	12	12	12					
G-6 CLERK .0216	PR	12	12	12					
G-5 CLERK-STENOGRAPHER .1053	PR	12	12	12					
G-4 CLERK-STENOGRAPHER .0217 .3334	PR	24	24	24					

Meetings of the Pan American Sanitary Conference, Directing Council, and WHO Regional Committee

Included in this section are the estimates for the costs of the meetings of the Pan American Sanitary Conference, Directing Council, and WHO Regional Committee, as well as for the Executive Committee meetings held at the same time.

TOTAL		198,300	200,000	200,000
-----		-----	-----	-----
SUBTOTAL	PR	134,700	134,700	134,700
-----	-----	-----	-----	-----
GOVERNING BODIES DOCS.		64,000	64,000	64,000
CONFERENCE SERVICES		70,700	70,700	70,700
SUBTOTAL	WR	63,600	65,300	65,300
-----	-----	-----	-----	-----
TEMPORARY PERSONNEL		3,500	3,500	3,500
DUTY TRAVEL		5,100	6,800	6,800
SUPPLIES AND EQUIPMENT		15,000	15,000	15,000
CONFERENCE SERVICES		40,000	40,000	40,000

Meetings of the Executive Committee

This section contains the estimated cost of the summer meetings of the Executive Committee, which are usually held in Washington. The estimates are based on the assumption that meetings will be held in the Bureau's conference facility.

TOTAL	PR	50,000	50,000	50,000
-----	-----	-----	-----	-----
TEMPORARY PERSONNEL		5,000	5,000	5,000
DUTY TRAVEL		1,500	1,500	1,500
SUPPLIES AND EQUIPMENT		2,500	2,500	2,500
CONFERENCE SERVICES		41,000	41,000	41,000

PART V. INCREASE TO ASSETS

INCREASE TO ASSETS
PROGRAM BUDGET

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
V. INCREASE TO ASSETS *****	650,000	100.0	500,000	100.0	500,000	100.0
GRAND TOTAL *****	650,000	100.0	500,000	100.0	500,000	100.0

*LESS THAN .05 PERCENT

INCREASE TO ASSETS
SUMMARY OF INVESTMENT

SOURCE OF FUNDS	TOTAL AMOUNT \$	PERSONNEL		DUTY TRAVEL AMOUNT \$	FELLOWSHIPS		SEMINARS AND COURSES \$	SUPPLIES AND EQUIPMENT \$	GRANTS \$	OTHER \$
		MONTHS PROF.	CONS. LOCAL MONTH		MONTHS	AMOUNT \$				
1977										
PAHQ---PR	650,000	-	-	-	-	-	-	-	-	650,000
TOTAL	650,000	-	-	-	-	-	-	-	-	650,000
PCT. OF TOTAL	100.0	-	-	-	-	-	-	-	-	100.0
1978										
PAHQ---PR	500,000	-	-	-	-	-	-	-	-	500,000
TOTAL	500,000	-	-	-	-	-	-	-	-	500,000
PCT. OF TOTAL	100.0	-	-	-	-	-	-	-	-	100.0
1979										
PAHQ---PR	500,000	-	-	-	-	-	-	-	-	500,000
TOTAL	500,000	-	-	-	-	-	-	-	-	500,000
PCT. OF TOTAL	100.0	-	-	-	-	-	-	-	-	100.0

PAHQ-PR-REGULAR BUDGET
PW-COMMUNITY WATER SUPPLY
PA-INCAP - REGULAR BUDGET
PN-INCAP - GRANTS AND OTHER CONTRIBUTIONS
PS-GRANTS AND OTHER CONTRIBUTIONS
PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

PAHQ-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND
PJ-GRANTS RELATED TO CAREC
WHO-WR-REGULAR BUDGET
UNDP-UNITED NATIONS DEVELOPMENT PROGRAM
UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES
WO-GRANTS AND OTHER FUNDS

Increase to Assets

In this category is included the amount for increasing the Working Capital Fund, in accordance with Resolution VII approved at the XI Meeting of the Directing Council.

TOTAL	PR	650,000	500,000	500,000
INCREASE TO ASSETS		650,000	500,000	500,000

PART VI. SPECIAL FUND FOR HEALTH PROMOTION

SPECIAL FUND FOR HEALTH PROMOTION - PROGRAM BUDGET^a

	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
VI. REPAYMENT OF LOAN	250,000	100.0	250,000	100.0	250,000	100.0

SUMMARY OF INVESTMENT^a

SOURCE OF FUNDS	TOTAL AMOUNT \$	-----PERSONNEL-----			DUTY TRAVEL AMOUNT \$	--FELLOWSHIPS--		SEMINARS AND COURSES \$	SUPPLIES AND EQUIPMENT \$	GRANTS \$	OTHER \$
		MONTHS PROF	LOCAL	STC MONTH		MONTHS	AMOUNT \$				
1977											
PAHO---PR*	250,000	-	-	-	-	-	-	-	-	-	250,000
PERCENT OF TOTAL	100.0	-	-	-	-	-	-	-	-	-	100.0
1978											
PAHO---PR*	250,000	-	-	-	-	-	-	-	-	-	250,000
PERCENT OF TOTAL	100.0	-	-	-	-	-	-	-	-	-	100.0
1979											
PAHO---PR*	250,000	-	-	-	-	-	-	-	-	-	250,000
PERCENT OF TOTAL	100.0	-	-	-	-	-	-	-	-	-	100.0

*REGULAR BUDGET

^{a/} In order to avoid a cumbersome and divided presentation of the program, the projects and portions of projects to be financed under this part are included with all the other projects presented under the respective country and intercountry headings, where they are identified by footnotes. Since these projects are included in the country and area summaries, the numbers marked in these tables are "non-add" figures. See the narrative portion of the "detail" section below for a further explanation of the Special Fund for Health Promotion.

SPECIAL FUND FOR HEALTH PROMOTION - DETAIL

The Special Fund for Health Promotion is based on an agreement with the W. K. Kellogg Foundation under which the Foundation agreed to lend to the Pan American Health Organization the sum of \$5,000,000 used toward erecting a headquarters building for the Pan American Health Organization, Regional Office for the Americas of the World Health Organization. This loan is repayable in annual installments, as agreed, beginning in 1962 and to be repaid in full on or before 1 January 1982, without interest. Instead of being made to the Foundation, however, these annual payments are allocated to a Special Fund for Health Promotion to finance expanded program activities. In view of the nature of this allocation, it is understood that the remaining items of the budget will cover and not reduce regular program activities.

PAHO is required to use the Fund to expand activities relating to (1) community water supplies; (2) nutrition; and (3) educational and training activities, including fellowships, although PAHO may from time to time revise these expanded activities by approval of the Directing Council or the Conference and give notice thereof to the Foundation.

Listed below are all projects composing the Special Fund. Individual projects are footnoted throughout this document.

		1977*	1978*	1979*
		\$	\$	\$
TOTAL FUNDS	PR	250,000	250,000	250,000
<u>Development of Human Resources</u>				
Program Planning and General Activities				
AMRO-6000, Development of Human Resources		62,560**	56,125**	49,535**
Environmental Sciences				
AMRO-6400, Sanitary Engineering Education		66,390	70,775	75,215
Dentistry				
AMRO-6600, Dental Education		21,050	23,100	25,250
<u>Technological Resources</u>				
Medical Textbooks				
AMRO-8100, Medical Textbooks		100,000**	100,000**	100,000**

*Non-add

**Partial

A N N E X E S

ANNEX 1
PROFESSIONAL STAFF SALARY SCALE
(Net)

EXPRESSED IN UNITED STATES DOLLARS

(Effective 1 January 1977)

		I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
D-2	D	33,552	34,277	35,002	35,738									
	S	30,756	31,398	32,039	32,687									
D-1)	D	29,245	29,960	30,680	31,395	32,112	32,794	33,456						
P-6)	S	26,931	27,567	28,208	28,845	29,481	30,085	30,671						
P-5	D	26,299	26,897	27,479	28,036	28,592	29,145	29,695	30,245	30,800	31,355			
	S	24,298	24,833	25,354	25,851	26,349	26,842	27,332	27,821	28,315	28,809			
P-4	D	21,756	22,309	22,862	23,420	23,964	24,504	25,039	25,574	26,135	26,684	27,230	27,750	
	S	20,209	20,709	21,208	21,713	22,202	22,687	23,167	23,647	24,152	24,642	25,131	25,596	
P-3	D	18,193	18,706	19,222	19,726	20,230	20,747	21,254	21,756	22,223	22,691	23,158	23,624	24,083
	S	16,978	17,444	17,913	18,371	18,829	19,298	19,756	20,209	20,631	21,054	21,476	21,897	22,309
P-2	D	15,096	15,539	15,976	16,404	16,839	17,267	17,702	18,137	18,568	19,000	19,432		
	S	14,149	14,555	14,954	15,345	15,742	16,133	16,530	16,927	17,319	17,711	18,104		
P-1	D	11,917	12,331	12,752	13,169	13,585	14,001	14,423	14,832	15,242	15,638			
	S	11,215	11,602	11,994	12,383	12,764	13,145	13,532	13,907	14,282	14,645			

D - Rate applicable to staff members with a dependent spouse or dependent child
S - Rate applicable to staff members with no dependent spouse or dependent child

ANNEX 2
SUMMARY OF PROFESSIONAL AND LOCAL PERSONNEL
ALL PARTS - ALL FUNDS
1977 - 1978 - 1979

		PERSONNEL MONTHS								
		TOTAL			PROFESSIONAL			LOCAL		
FUND SYMBOL		1977	1978	1979	1977	1978	1979	1977	1978	1979
DETAIL BY PART:										
PART I SERVICES TO INDIVIDUALS.....TOTAL		13,767	13,138	12,636	5,148	4,739	4,434	8,619	8,399	8,202
PAHO REGULAR	PR	4,843	4,890	4,896	2,274	2,289	2,292	2,569	2,601	2,604
GRANTS RELATED TO CAREC	PJ	648	732	732	48	60	60	600	672	672
PAHO COMMUNITY WATER SUPPLY	PW	358	300	84	274	228	60	84	72	24
INCAP MEMBER GOVERNMENTS	PA	1,536	1,536	1,536	228	228	228	1,308	1,308	1,308
INCAP GRANTS AND OTHER CONTRIBUTIONS	PN	1,860	1,800	1,800	144	120	120	1,716	1,680	1,680
PAN AMERICAN HEALTH AND EDUCATION FCUNDATION	PH	696	360	156	240	120	60	456	240	96
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	1,704	1,447	1,314	400	191	66	1,304	1,256	1,248
WHO REGULAR	WR	1,602	1,644	1,716	1,218	1,260	1,308	384	384	408
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	177	105	132	159	105	132	18	-	-
UNITED NATIONS FUND FOR POPULATION ACTIVITIES	UNFPA	341	324	270	161	138	108	180	186	162
WHO GRANTS AND OTHER CONTRIBUTIONS	WO	2	-	-	2	-	-	-	-	-
PART II DEVELOPMENT OF THE INFRASTRUCTURE.....TOTAL		5,285	5,202	4,991	3,030	2,910	2,771	2,255	2,292	2,220
PAHO REGULAR	PR	3,428	3,448	3,444	1,796	1,804	1,800	1,632	1,644	1,644
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION	PH	166	167	167	59	59	59	107	108	108
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	285	200	12	213	128	12	72	72	-
WHO REGULAR	WR	1,122	1,164	1,200	726	744	780	396	420	420
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	284	223	168	236	175	120	48	48	48
PART III ADMINISTRATIVE DIRECTION.....TOTAL		2,880	2,922	2,916	864	882	864	2,016	2,040	2,052
PAHO REGULAR	PR	2,388	2,430	2,424	696	714	696	1,692	1,716	1,728
WHO REGULAR	WR	492	492	492	168	168	168	324	324	324
PART IV GOVERNING BODIES.....TOTAL		168	168	168	72	72	72	96	96	96
PAHO REGULAR	PR	132	132	132	36	36	36	96	96	96
WHO REGULAR	WR	36	36	36	36	36	36	-	-	-
.....TOTAL ALL PARTS.....		22,100	21,430	20,711	9,114	8,603	8,141	12,986	12,827	12,570
DETAIL BY FUND:										
PAHO REGULAR	PR	10,791	10,900	10,896	4,802	4,843	4,824	5,989	6,057	6,072
PAHO COMMUNITY WATER SUPPLY	PW	358	300	84	274	228	60	84	72	24
GRANTS RELATED TO CAREC	PJ	648	732	732	48	60	60	600	672	672
INCAP MEMBER GOVERNMENTS	PA	1,536	1,536	1,536	228	228	228	1,308	1,308	1,308
INCAP GRANTS AND OTHER CONTRIBUTIONS	PN	1,860	1,800	1,800	144	120	120	1,716	1,680	1,680
PAN AMERICAN HEALTH AND EDUCATION FCUNDATION	PH	862	527	323	299	179	119	563	348	204
GRANTS AND OTHER CONTRIBUTIONS TO PAHO	PG	1,989	1,647	1,326	613	319	78	1,376	1,328	1,248
WHO REGULAR	WR	3,252	3,336	3,444	2,148	2,208	2,292	1,104	1,128	1,152
UNITED NATIONS DEVELOPMENT PROGRAM	UNDP	461	328	300	395	280	252	66	48	48
UNITED NATIONS FUND FOR POPULATION ACTIVITIES	UNFPA	341	324	270	161	138	108	180	186	162
WHO GRANTS AND OTHER CONTRIBUTIONS	WO	2	-	-	2	-	-	-	-	-
.....TOTAL ALL FUNDS.....		22,100	21,430	20,711	9,114	8,603	8,141	12,986	12,827	12,570

ANNEX 3

DETAIL OF GRANTS AND OTHER CONTRIBUTIONS TO PAHO AND WHO
BY SOURCE OF FUND AND BY PROGRAM

	1977 \$	1978 \$	1979 \$
A) <u>By Source of Fund</u>			
<u>Pan American Health Organization</u>	<u>13,085,855</u>	<u>6,611,755</u>	<u>5,551,394</u>
Caribbean Epidemiology Center: Budget from Member Countries, the Overseas Development Agency, and Miscellaneous Income (PJ)	489,990	511,785	548,190
Caribbean Epidemiology Center: Grants and Other Contributions (PJ)	413,781	96,770	-
Caribbean Food and Nutrition Institute: Budget from Member Countries (PG)	109,050	118,458	130,304
Ford Foundation (PG)	100,944	5,000	-
Government of Argentina (PG)	530,396	645,932	756,084
Government of Barbados (PG)	6,000	-	-
Government of Bolivia (PG)	140,448	162,108	96,444
Government of Brazil (PG)	2,999,874	859,905	508,244
Government of Canada (PG)	532,199	219,180	167,000
Government of Costa Rica (PG)	167,496	100,000	100,000
Government of the Dominican Republic (PG)	48,027	-	-
Government of Ecuador (PG)	43,872	-	-
Government of Guatemala (PG)	94,560	-	-
Government of Honduras (PG)	981,593	132,972	-
Government of Mexico (PG)	98,694	90,000	98,000
Government of Nicaragua (PG)	360,364	113,344	-
Government of Panama (PG)	49,000	-	-
Government of Paraguay (PG)	161,102	43,670	14,000
Government of Peru (PG)	381,376	94,860	113,168
Government of Surinam (PG)	1,299	-	-
Government of Trinidad and Tobago (PG)	48,277	-	-
Government of the United States of America (PG)	1,184,410	230,015	-
Government of Venezuela (PG)	547,273	-	-
Institute of Nutrition of Central America and Panama: Budget from Member Countries and Miscellaneous Income (PA)	374,910	425,000	425,000
Institute of Nutrition of Central America and Panama: Grants and Other Contributions (excluding PAHEF) (PN)	2,307,685	2,400,000	2,500,000
Inter-American Development Bank (PG)	525,464	302,756	53,363
International Center for the Formulation of Environmental Sciences in Spanish Speaking Countries (PG)	2,158	-	-
International Union Against Tuberculosis (PG)	2,786	-	-
Medical Research Council (PG)	25,074	-	-
Merck Sharp and Dohme International (PG)	18,016	-	-
Organization of American States (PG)	26,930	-	-
PAHO Natural Disaster Relief Voluntary Fund (PD)	100,000	-	-
Publication Sales (Pan American Center for Sanitary Engineering and Environmental Sciences) (PG)	2,728	-	-
United Nations Children's Fund (PG)	144,375	60,000	41,597
University of Oklahoma (PG)	2,180	-	-
World Health Organization (PG)	63,524	-	-
<u>World Health Organization</u>	<u>15,637</u>	<u>-</u>	<u>-</u>
United Nations Environmental Program (WE)	5,862	-	-
United Nations Reimbursable (WL)	9,775	-	-
GRAND TOTAL	13,101,492	6,611,755	5,551,394
	=====	=====	=====

ANNEX 3 . . . continued

DETAIL OF GRANTS AND OTHER CONTRIBUTIONS TO PAHO AND WHO
BY SOURCE OF FUND AND BY PROGRAM

	1977 \$	1978 \$	1979 \$	Project
B) <u>By Program</u>				
I. <u>Program of Services</u>	<u>8,475,806</u>	<u>5,331,096</u>	<u>5,035,531</u>	
<u>Services to Individuals</u>	<u>3,529,919</u>	<u>3,173,491</u>	<u>3,096,901</u>	
0100 - Communicable Diseases - Program Planning and General Activities	2,786	-	-	
International Union Against Tuberculosis (PG)	2,786	-	-	PER-0100, Communicable Diseases
0200 - Malaria	122,260	-	-	
Government of the United States of America (PG)	122,260	-	-	AMR-0202, Research in Malaria and Other Parasitic Diseases
1300 - Maternal and Child Health and Family Welfare	24,056	15,000	-	
United Nations Children's Fund (PG)	24,056	15,000	-	AMR-1331, Maternal and Child and Family Health in Rural Areas (Area III)
1400 - Nutrition	3,101,907	3,036,158	3,096,901	
Caribbean Food and Nutrition Institute: Budget from Member Countries (PG)	109,050	118,458	130,304	AMR-1411, Caribbean Food and Nutrition Institute
Ford Foundation (PG)	100,944	5,000	-	AMR-1411, Caribbean Food and Nutrition Institute
Government of Canada (PG)	39,966	42,700	-	HAI-1400, Nutrition
Government of the United States of America (PG)	54,590	-	-	AMR-1474, Nutrition Research
Institute of Nutrition of Central America and Panama: Budget from Member Countries and Miscellaneous Income (PA)	374,910	425,000	425,000	AMR-1430, Institute of Nutrition of Central America and Panama
Institute of Nutrition of Central America and Panama: Grants and Other Contribu- tions (excluding PAHEF) (PN)	2,307,685	2,400,000	2,500,000	AMR-1430, Institute of Nutrition of Central America and Panama
United Nations Children's Fund (PG)	44,500	-	-	AMR-1401, National Food and Nutrition Policies
United Nations Children's Fund (PG)	70,262	45,000	41,597	AMR-1411, Caribbean Food and Nutrition Institute
1500 - Mental Health	102,635	14,078	-	
Government of the United States of America (PG)	102,635	14,078	-	AMR-1583, Epidemiology of Alcoholism
1600 - Dental Health	1,294	-	-	
Government of Mexico (PG)	1,294	-	-	MEX-1600, Oral Health
1700 - Chronic Diseases	174,981	108,255	-	
Government of the United States of America (PG)	161,749	108,255	-	AMR-1779, Latin American Cancer Research Project
Merck Sharp and Dohme International (PG)	13,232	-	-	AMR-1776, Control of Cardio- vascular Diseases
<u>Environmental Health Services</u>	<u>3,567,155</u>	<u>1,549,050</u>	<u>1,390,440</u>	
2000 - Environmental Health Services - Program Planning and General Activities	190,183	104,340	113,168	
Government of Canada (PG)	13,063	9,480	-	AMR-2070, Pan American Center for Sanitary En- gineering and Environ- mental Sciences
Government of Peru (PG)	156,334	94,860	113,168	AMR-2070, Pan American Center for Sanitary En- gineering and Environ- mental Sciences
International Center for the Formulation of Environmental Sciences in Spanish Speaking Countries (PG)	2,158	-	-	AMR-2070, Pan American Center for Sanitary En- gineering and Environ- mental Sciences
Publication Sales (Pan American Center for Sanitary Engineering and Environmental Sciences) (PG)	2,728	-	-	AMR-2070, Pan American Center for Sanitary En- gineering and Environ- mental Sciences

ANNEX 3 . . . continued

DETAIL OF GRANTS AND OTHER CONTRIBUTIONS TO PAHO AND WHO
BY SOURCE OF FUND AND BY PROGRAM

	1977 \$	1978 \$	1979 \$	Project
University of Oklahoma (PG)	2,180	-	-	AMR-2070, Pan American Center for Sanitary Engineering and Environmental Sciences
World Health Organization (PG)	13,720	-	-	AMR-2070, Pan American Center for Sanitary Engineering and Environmental Sciences
<u>2100 - Water Supply and Excreta Disposal</u>	<u>187,005</u>	<u>-</u>	<u>-</u>	
Government of Barbados (PG)	6,000	-	-	BAR-2100, Waterworks Administration
Government of Canada (PG)	181,005	-	-	AMR-2174, Caribbean Basin Water Management Program
<u>2300 - Environmental Pollution - Program Planning and General Activities</u>	<u>105,860</u>	<u>90,000</u>	<u>98,000</u>	
Government of Mexico (PG)	63,000	90,000	98,000	AMR-2300, Center for Human Ecology and Health
Government of Venezuela (PG)	36,998	-	-	VEN-2300, Environmental Pollution Research Center
United Nations Environmental Program (WE)	5,862	-	-	AMR-2300, Center for Human Ecology and Health
<u>3100 - Animal Health and Veterinary Public Health - Program Planning and General Activities</u>	<u>1,726,862</u>	<u>546,670</u>	<u>326,744</u>	
Government of Brazil (PG)	359,492	159,744	159,744	BRA-3102, National Veterinary Reference and Training Laboratory
Government of Canada (PG)	167,000	167,000	167,000	WIN-3101, Mobile Veterinary Laboratory Services
Government of Honduras (PG)	143,280	132,972	-	HON-3100, Veterinary Public Health
Government of Nicaragua (PG)	37,889	-	-	NIC-3101, Animal Health Study
Government of Panama (PG)	49,000	-	-	PAN-3100, Veterinary Public Health
Government of Paraguay (PG)	101,308	-	-	PAR-3100, Veterinary Public Health
Government of Surinam (PG)	1,299	-	-	SUR-3100, Veterinary Public Health
Government of the United States of America (PG)	152,986	-	-	AMR-3171, Conservation of Non-Human Primates
Government of Venezuela (PG)	510,275	-	-	VEN-3100, Veterinary Public Health
Inter-American Development Bank (PG)	199,549	86,954	-	AMR-3131, Communication in Animal Health (Area III)
Merck Sharp and Dohme International (PG)	2,784	-	-	AMR-3171, Conservation of Non-Human Primates
Merck Sharp and Dohme International (PG)	2,000	-	-	AMR-3180, Conference on the Use of South American Primates for Biomedical Research
<u>3200 - Foot-and-Mouth Disease</u>	<u>1,185,701</u>	<u>808,040</u>	<u>852,528</u>	
Government of Argentina (PG)	530,396	645,932	756,084	AMR-3200, Pan American Foot-and-Mouth Disease Center
Government of Bolivia (PG)	140,448	162,108	96,444	BOL-3200, Control of Aftosa, Rabies, and Brucellosis
Government of Brazil (PG)	87,859	-	-	AMR-3200, Pan American Foot-and-Mouth Disease Center
Government of Brazil (PG)	149,754	-	-	BRA-3201, Technical Assistance and Training in Foot-and-Mouth Disease
Government of Paraguay (PG)	2,634	-	-	PAR-3200, Foot-and-Mouth Disease Control
Government of Peru (PG)	121,530	-	-	PER-3200, Foot-and-Mouth Disease Control
Inter-American Development Bank (PG)	5,218	-	-	AMR-3200, Pan American Foot-and-Mouth Disease Center
Inter-American Development Bank (PG)	147,862	-	-	BRA-3201, Technical Assistance and Training in Foot-and-Mouth Disease

ANNEX 3 . . . continued

DETAIL OF GRANTS AND OTHER CONTRIBUTIONS TO PAHO AND WHO
BY SOURCE OF FUND AND BY PROGRAM

	1977 \$	1978 \$	1979 \$	Project
<u>3300 - Zoonoses</u>	<u>76,984</u>	<u>-</u>	<u>-</u>	
Government of the United States of America (PG)	76,984	-	-	MEX-3301, Rabies Control: Mexico-United States Border
<u>3500 - Quality Control of Food Stuffs</u>	<u>94,560</u>	<u>-</u>	<u>-</u>	
Government of Guatemala (PG)	94,560	-	-	GUT-3500, Unified Food Control Laboratory
<u>Complementary Services</u>	<u>1,378,732</u>	<u>608,555</u>	<u>548,190</u>	
<u>4200 - Laboratories</u>	<u>103,512</u>	<u>-</u>	<u>-</u>	
Government of Peru (PG)	103,512	-	-	PER-4201, National Health Laboratories
<u>4300 - Epidemiological Surveillance</u>	<u>1,265,445</u>	<u>608,555</u>	<u>548,190</u>	
Caribbean Epidemiology Center: Budget from Member Countries, the Overseas Development Agency, and Miscellaneous Income (PJ)	489,990	511,785	548,190	AMR-4370, Caribbean Epi- demiology Center
Caribbean Epidemiology Center: Grants and Other Contributions (PJ)	413,781	96,770	-	AMR-4370, Caribbean Epi- demiology Center
Government of the United States of America (PG)	336,600	-	-	BRA-4311, Vectors and Natural Reservoirs of Oropouch Viruses in the Amazon Region
Medical Research Council (PG)	25,074	-	-	GUY-4301, Taxonomy, Ecology, and Vector Potential of the Man-Biting Simuliidae
<u>4400 - Health Education</u>	<u>9,775</u>	<u>-</u>	<u>-</u>	
United Nations Reimbursable (WL)	9,775	-	-	MEX-4400, Community Develop- ment and Health Promo- tion Training
 II. Development of the Infrastructure	 4,625,686	 1,280,659	 515,863	
<u>Health Systems</u>	<u>3,157,733</u>	<u>467,154</u>	<u>167,363</u>	
<u>5100 - General Public Health Systems</u>	<u>1,902,994</u>	<u>259,472</u>	<u>67,363</u>	
Government of Brazil (PG)	1,322,732	-	-	BRA-5160, Integrated Health Delivery Systems
Government of Canada (PG)	48,500	-	-	AMR-5170, Primary Health Services and Community Participation
Government of Ecuador (PG)	30,975	-	-	ECU-5102, Modernization of Rural Life
Government of Nicaragua (PG)	94,058	-	-	NIC-5102, Extension of Cover- age of Health Services
Government of Paraguay (PG)	57,160	43,670	14,000	PAR-5103, Extension of Cover- age of Health Services
Inter-American Development Bank (PG)	172,835	215,802	53,363	HAI-5100, Development of Health Services
Organization of American States (PG)	26,930	-	-	HON-5102, Emergency Assis- tance
PAHO Natural Disaster Relief Voluntary Fund (PD)	100,000	-	-	AMR-5171, Emergency Prepared- ness and Disaster Relief Coordination
World Health Organization (PG)	49,804	-	-	GUT-5101, Emergency Assis- tance
<u>5200 - Medical Care Systems</u>	<u>517,424</u>	<u>-</u>	<u>-</u>	
Government of Costa Rica (PG)	73,617	-	-	COR-5202, Hospital Adminis- tration
Government of Ecuador (PG)	12,897	-	-	ECU-5201, Planning and Equip- ping of Hospitals and Other Health Facilities
Government of Honduras (PG)	430,910	-	-	HON-5201, Hospital Planning and Administration

ANNEX 3 . . . continued
 DETAIL OF GRANTS AND OTHER CONTRIBUTIONS TO PAHO AND WHO
 BY SOURCE OF FUND AND BY PROGRAM

	<u>1977</u> \$	<u>1978</u> \$	<u>1979</u> \$	<u>Project</u>
<u>5300 - Planning</u>	<u>188,006</u>	<u>107,682</u>	<u>-</u>	
Government of Canada (PG)	11,400	-	-	CAN-5300, Health Planning
Government of the United States of America (PG)	176,606	107,682	-	USA-5300, Health Planning
<u>5500 - Management Systems</u>	<u>549,309</u>	<u>100,000</u>	<u>100,000</u>	
Government of Costa Rica (PG)	93,879	100,000	100,000	COR-5500, Management of Health Services
Government of the Dominican Republic (PG)	48,027	-	-	DOR-5500, Administrative Reform in the Ministry of Health
Government of Honduras (PG)	407,403	-	-	HON-5501, Improvement of Administrative Services
<u>Development of Human Resources</u>	<u>661,779</u>	<u>465,005</u>	<u>-----</u>	
<u>6000 - Development of Human Resources - Program Planning and General Activities</u>	<u>584,957</u>	<u>465,005</u>	<u>-</u>	
Government of Brazil (PG)	356,540	351,661	-	BRA-6000, Development of Human Resources
Government of Nicaragua (PG)	228,417	113,344	-	NIC-6000, Improvement of Teaching in the Faculties of Health Sciences
<u>6900 - Other Health Personnel</u>	<u>76,822</u>	<u>-</u>	<u>-</u>	
Government of Canada (PG)	71,265	-	-	AMR-6910, Education and Training of Paramedical Personnel (Caribbean)
United Nations Children's Fund (PG)	5,557	-	-	AMR-6910, Education and Training of Paramedical Personnel (Caribbean)
<u>Physical Resources</u>	<u>82,677</u>	<u>-----</u>	<u>-----</u>	
<u>7300 - Production of Biologicals</u>	<u>34,400</u>	<u>-</u>	<u>-</u>	
Government of Mexico (PG)	34,400	-	-	MEX-7301, National Health Laboratories
<u>7400 - Maintenance of Health Care Facilities</u>	<u>48,277</u>	<u>-</u>	<u>-</u>	
Government of Trinidad and Tobago (PG)	48,277	-	-	TRT-7400, Health and Maintenance Services
<u>Technological Resources</u>	<u>723,497</u>	<u>348,500</u>	<u>348,500</u>	
<u>8500 - Regional Libraries</u>	<u>723,497</u>	<u>348,500</u>	<u>348,500</u>	
Government of Brazil (PG)	723,497	348,500	348,500	AMR-8570, Regional Library of Medicine and the Health Sciences
 GRAND TOTAL	 <u>13,101,492</u> =====	 <u>6,611,755</u> =====	 <u>5,551,394</u> =====	

ANNEX 4

PROJECTS PROPOSED TO BE IMPLEMENTED
IF FUNDS BECOME AVAILABLE

	Personnel Costs \$	Supplies and Other \$	Fellowships and Seminars \$	Total \$
<u>Communicable Diseases - Program Planning and General Activities</u>	6,000	50,500	18,890	75,390
Argentina-0100, Communicable Disease Control	-	30,000	-	30,000
Ecuador-0100, Disease Prevention and Control	-	1,000	16,390	17,390
Paraguay-0100, Communicable Diseases	-	12,000	-	12,000
AMRO-0170, Diseases Preventable by Vaccines	6,000	7,500	2,500	16,000
<u>Malaria</u>	-	13,180	10,000	23,180
Mexico-0200, Malaria Eradication	-	13,180	-	13,180
AMRO-0200, Malaria Technical Advisory Services	-	-	10,000	10,000
<u>Tuberculosis</u>	6,000	30,000	-	36,000
Argentina-0400, Tuberculosis Control	-	30,000	-	30,000
AMRO-0400, Tuberculosis Control	6,000	-	-	6,000
<u>Venereal Diseases</u>	-	3,100	5,825	8,925
AMRO-0600, Venereal Disease and Treponematoses	-	3,100	5,825	8,925
<u>Parasitic Diseases</u>	-	43,000	5,000	48,000
Argentina-0800, Chagas' Disease and Hemorrhagic Fever	-	30,000	5,000	35,000
AMRO-0800, Parasitic Diseases	-	13,000	-	13,000
<u>Vector Biology and Control</u>	-	23,730	-	23,730
AMRO-0901, Research in Insecticides, Resistance and New Methods of Control	-	15,230	-	15,230
AMRO-0902, Research and Reference Center on Vector Biology and Control	-	8,500	-	8,500
<u>Other Communicable Diseases</u>	48,970	4,500	5,930	59,400
AMRO-1200, Viral Diseases	3,000	2,500	5,930	11,430
AMRO-1201, Bacterial Diseases	45,970	2,000	-	47,970
<u>Maternal and Child Health and Family Welfare</u>	-	-	19,390	19,390
Argentina-1301, Maternal and Child Health	-	-	7,000	7,000
Paraguay-1300, Family Health and Population Dynamics	-	-	12,390	12,390
<u>Nutrition</u>	27,000	50,000	33,630	110,630
Argentina-1400, Nutrition Studies	-	50,000	9,735	59,735
Bolivia-1400, Nutrition	-	-	4,425	4,425
AMRO-1400, Nutrition Advisory Services	6,000	-	-	6,000
AMRO-1401, National Food and Nutrition Policies	3,000	-	9,735	12,735
AMRO-1472, Nutrition Training	6,000	-	9,735	15,735
AMRO-1474, Nutrition Research	6,000	-	-	6,000
AMRO-1475, Surveillance of Nutritional Status	6,000	-	-	6,000
<u>Mental Health</u>	6,000	2,030	42,480	50,510
Argentina-1500, Mental Health	-	-	39,825	39,825
Jamaica-1500, Mental Health	-	2,030	2,655	4,685
AMRO-1500, Mental Health	6,000	-	-	6,000
<u>Dental Health</u>	30,000	242,000	33,275	305,275
Argentina-1600, Dental Health	-	220,000	-	220,000
Mexico-1600, Oral Health	6,000	22,000	25,620	53,620
AMRO-1671, Fluoridation	9,000	-	5,000	14,000
AMRO-1672, Laboratory for Control of Dental Products	3,000	-	-	3,000
AMRO-1673, Human and Material Resources in Dentistry	6,000	-	-	6,000
AMRO-1674, Communications and Information in Dental Sciences	6,000	-	2,655	8,655
<u>Chronic Diseases</u>	-	-	5,310	5,310
Chile-1700, Chronic Diseases	-	-	5,310	5,310
<u>Environmental Health Services - Program Planning and General Activities</u>	212,505	12,870	95,625	321,000
Barbados-2000, Environmental Sanitation	-	-	5,310	5,310
Barbados-2001, Public Health Engineering	52,800	500	13,200	66,500
Bolivia-2001, Housing and Urban Affairs	60,450	5,750	33,750	99,950
Brazil-2000, Environmental Sanitation	-	-	10,620	10,620
Honduras-2000, Engineering and Environmental Sciences	12,000	-	17,700	29,700
Jamaica-2000, Water Supplies and Environmental Sanitation	29,285	4,620	9,735	43,640
Nicaragua-2000, Environmental Sanitation	-	-	5,310	5,310
AMRO-2030, Sanitary Engineering (Area III)	7,000	-	-	7,000
AMRO-2090, Food Sanitation	50,970	2,000	-	52,970
<u>Water Supply and Excreta Disposal</u>	9,000	-	7,965	16,965
Mexico-2100, Water Supplies and Sewerage Systems	9,000	-	7,965	16,965
<u>Environmental Pollution - Radiation and Isotopes</u>	-	-	20,050	20,050
AMRO-2570, Radiation Health Protection	-	-	20,050	20,050

ANNEX 4 continued
PROJECTS PROPOSED TO BE IMPLEMENTED
IF FUNDS BECOME AVAILABLE

	Personnel Costs	Supplies and Other	Fellowships and Seminars	Total
<u>Pesticides</u>	29,785	-	11,000	40,785
AMRO-2600, Control of Toxic Substances	29,785	-	11,000	40,785
<u>Animal Health and Veterinary Public Health - Program Planning and General Activities</u>	64,000	63,000	44,435	171,435
Brazil-3100, Veterinary Public Health	-	-	12,390	12,390
Colombia-3100, Veterinary Public Health	-	-	5,310	5,310
Jamaica-3100, Veterinary Public Health	-	-	9,735	9,735
Surinam-3101, Strengthening Veterinary Services	64,000	63,000	11,000	138,000
AMRO-3110, Veterinary Public Health (Area I)	-	-	6,000	6,000
<u>Zoonoses</u>	36,000	8,000	17,700	61,700
Mexico-3300, Zoonoses Control	-	5,000	9,735	14,735
Mexico-3302, Production of Veterinary Biologicals	36,000	3,000	7,965	46,965
<u>Quality Control of Foodstuffs</u>	42,700	1,000	8,000	51,700
AMRO-3500, Food Hygiene	42,700	1,000	8,000	51,700
<u>Quality Control of Drugs</u>	6,000	26,500	8,000	40,500
Argentina-3600, Cost and Quality of Drugs	-	25,000	-	25,000
Jamaica-3600, Caribbean Regional Drug Testing Laboratory	6,000	-	-	6,000
AMRO-3600, Drug Control	-	1,500	8,000	9,500
<u>Complementary Services - Nursing</u>	-	-	22,400	22,400
AMRO-4110, Nursing (Area I)	-	-	22,400	22,400
<u>Laboratories</u>	14,735	212,000	7,965	234,700
Argentina-4200, Laboratory Services	-	212,000	-	212,000
Colombia-4200, Laboratory Services	-	-	5,310	5,310
Colombia-4201, National Institute of Health (Carlos Finlay)	-	-	2,655	2,655
Venezuela-4200, Laboratory Services	6,000	-	-	6,000
AMRO-4200, Laboratory Services	8,735	-	-	8,735
<u>Epidemiological Surveillance</u>	42,000	63,980	47,820	153,800
Brazil-4300, Epidemiology	-	-	21,240	21,240
Guatemala-4300, Vaccination and Epidemiological Surveillance	-	42,000	-	42,000
Honduras-4300, Epidemiology and Laboratory Services	6,000	-	21,270	27,270
Jamaica-4300, Epidemiology of Sexually-transmitted Diseases	9,000	3,000	-	12,000
AMRO-4300, Epidemiological Surveillance	3,000	4,520	-	7,520
AMRO-4331, Vaccination and Epidemiological Surveillance in Central America and Panama	24,000	14,460	5,310	43,770
<u>Health Education</u>	9,000	-	5,310	14,310
Brazil-4400, Health Education	3,000	-	5,310	8,310
AMRO-4410, Health Education (Caribbean)	6,000	-	-	6,000
<u>Rehabilitation</u>	48,000	5,000	7,270	140,270
Brazil-4500, Rehabilitation Training Center (Brasilia)	6,000	-	25,565	31,665
Colombia-4500, Medical Rehabilitation	12,000	5,000	31,020	48,020
Jamaica-4500, Rehabilitation	24,000	-	13,275	37,275
Mexico-4500, Rehabilitation	6,000	-	5,310	11,310
AMRO-4581, Basic and Extended Services in Disability Prevention and Rehabilitation	-	-	12,000	12,000
<u>Health Systems - Program Planning and General Activities</u>	-	9,000	-	9,000
Honduras-5000, Program Planning and General Activities	-	9,000	-	9,000
<u>General Public Health Systems</u>	215,005	60,350	322,025	597,380
Argentina-5100, Development of Health Services	-	6,350	5,310	11,660
Barbados-5100, Development of Health Services	-	-	5,310	5,310
Belize-5100, Development of Health Services	-	-	9,175	9,175
Brazil-5100, Development of Health Services	3,000	-	6,195	9,195
Chile-5100, Development of Health Services	-	-	5,310	5,310
Costa Rica-5100, Development of Health Services	-	-	46,905	46,905
Cuba-5100, Development of Health Services	-	17,400	-	17,400
Ecuador-5100, Development of Health Services	-	-	8,830	8,830
Grenada-5100, Development of Health Services	-	-	4,425	4,425
Guatemala-5100, Development of Health Services	18,000	-	-	18,000
Guyana-5100, Development of Health Services	-	-	12,390	12,390
Honduras-5100, Development of Health Services	-	-	37,170	37,170
Mexico-5100, Development of Health Services	65,570	-	20,355	85,925
Mexico-5102, Health Services in Chiapas	35,815	-	32,805	68,620
Nicaragua-5100, Development of Health Services	-	-	7,080	7,080
Panama-5100, Development of Health Services	-	-	15,045	15,045
Peru-5100, Development of Health Services	-	3,925	4,850	8,775
Peru-5101, Development of Health Services in the Eastern Region	-	5,500	-	5,500
Trinidad and Tobago-5100, Development of Health Services	-	-	23,010	23,010
Venezuela-5100, Strengthening Health Services	15,000	-	-	15,000
West Indies-5100, Development of Health Services (Leeward Islands)	-	1,825	2,655	4,480
West Indies-5101, Development of Health Services (Windward Islands)	-	-	9,735	9,735
AMRO-5100, Health Services Development	7,835	-	-	7,835
AMRO-5170, Primary Health Services and Community Participation	54,285	5,350	24,850	84,485
AMRO-5171, Emergency Preparedness and Disaster Relief Coordination	15,500	20,000	40,620	76,120

ANNEX 4 continued

PROJECTS PROPOSED TO BE IMPLEMENTED
IF FUNDS BECOME AVAILABLE

	Personnel Costs	Supplies and Other	Fellowships and Seminars	Total
<u>Medical Care Systems</u>	<u>68,285</u>	<u>154,800</u>	<u>54,515</u>	<u>277,600</u>
Argentina-5201, Medical Care	29,285	60,000	7,965	97,250
Cuba-5201, Community Medicine	15,000	93,800	26,550	135,350
AMRO-5200, Medical Care Systems	6,000	-	-	6,000
AMRO-5201, Planning of Health Establishments	6,000	1,000	-	7,000
AMRO-5274, Development of Primary Networks of Medical Care	12,000	-	20,000	32,000
<u>Planning</u>	<u>162,705</u>	<u>2,000</u>	<u>72,090</u>	<u>236,795</u>
Bolivia-5300, Health Planning	9,000	-	-	9,000
United States of America-5300, Health Planning	8,735	-	-	8,735
AMRO-5302, Preinvestment Survey for Extension of Health Services	126,970	2,000	40,000	168,970
AMRO-5310, Health Planning and Organization (Area I)	18,000	-	32,090	50,090
<u>Statistics and Information Systems</u>	<u>61,585</u>	<u>4,000</u>	<u>78,205</u>	<u>143,790</u>
Argentina-5400, Health Statistics	-	-	29,205	29,205
Bolivia-5400, Health Statistics	-	-	2,000	2,000
Colombia-5401, Redesign of Health Information Systems	16,800	2,000	22,000	40,800
Jamaica-5401, Biostatistics Education	6,000	-	-	6,000
AMRO-5403, Latin American Center for Classification of Diseases	-	-	25,000	25,000
AMRO-5470, Interamerican Investigation of Mortality in Childhood	32,785	2,000	-	34,785
AMRO-5480, Regional Seminar on Computer Science	6,000	-	-	6,000
<u>Management Systems</u>	<u>175,520</u>	<u>9,450</u>	<u>96,565</u>	<u>281,535</u>
Argentina-5500, Management of Health Services	-	-	15,000	15,000
Colombia-5500, Administrative Development of the Health System	136,000	9,450	64,750	210,200
Peru-5500, Management of Health Services	-	-	9,735	9,735
Trinidad and Tobago-5500, Management of Health Services	-	-	7,080	7,080
AMRO-5500, Management of Health Services	39,520	-	-	39,520
<u>Development of Human Resources - Program Planning and General Activities</u>	<u>46,285</u>	<u>19,500</u>	<u>162,170</u>	<u>227,955</u>
Colombia-6000, Development of Human Resources	-	-	11,505	11,505
El Salvador-6000, Development of Human Resources	-	-	46,020	46,020
Mexico-6000, Development of Human Resources	-	2,000	19,470	21,470
Paraguay-6000, Development of Human Resources	3,000	-	14,000	17,000
AMRO-6072, Assistance to Regional Organizations in Health Sciences Education and Research	43,285	17,500	71,175	131,960
<u>Public Health</u>	<u>-</u>	<u>-</u>	<u>7,965</u>	<u>7,965</u>
Peru-6100, School of Public Health	-	-	7,965	7,965
<u>Nursing</u>	<u>-</u>	<u>-</u>	<u>19,470</u>	<u>19,470</u>
Mexico-6300, Nursing Education	-	-	19,470	19,470
<u>Environmental Sciences</u>	<u>6,000</u>	<u>3,000</u>	<u>8,425</u>	<u>17,425</u>
Bolivia-6400, Sanitary Engineering Education	-	-	4,425	4,425
Mexico-6400, Sanitary Engineering Education	6,000	3,000	4,000	13,000
<u>Veterinary Medicine</u>	<u>6,000</u>	<u>2,000</u>	<u>12,965</u>	<u>20,965</u>
Bolivia-6500, Veterinary Medicine Education	-	-	2,000	2,000
Mexico-6500, Veterinary Medicine Education	6,000	2,000	10,965	18,965
<u>Dentistry</u>	<u>-</u>	<u>-</u>	<u>7,080</u>	<u>7,080</u>
Barbados-6600, Dental Education	-	-	7,080	7,080
<u>Other Health Personnel</u>	<u>-</u>	<u>-</u>	<u>65,000</u>	<u>65,000</u>
Argentina-6900, Training of Middle-level Health Personnel	-	-	15,000	15,000
Mexico-6901, Training of Health Auxiliaries	-	-	50,000	50,000
<u>Physical Resources - Production of Biologicals</u>	<u>184,785</u>	<u>107,000</u>	<u>7,965</u>	<u>299,750</u>
Colombia-7300, Production of Biologicals at the National Institute of Health	30,285	12,000	-	42,285
Colombia-7301, Production of Yellow Fever Vaccine	-	25,000	-	25,000
Mexico-7300, Vaccine Production	-	50,000	-	50,000
Mexico-7301, National Health Laboratories	54,000	5,000	7,965	66,965
Venezuela-7300, National Institute of Hygiene	94,500	-	-	94,500
AMRO-7300, Production and Quality Control of Biologicals	6,000	15,000	-	21,000
<u>Maintenance of Health Care Facilities</u>	<u>38,545</u>	<u>6,200</u>	<u>12,000</u>	<u>56,745</u>
Colombia-7400, Maintenance and Installation of Hospital Equipment	-	4,000	4,000	8,000
Colombia-7402, Hospital Architecture	38,545	2,200	8,000	48,745
<u>Editorial Services</u>	<u>8,735</u>	<u>-</u>	<u>-</u>	<u>8,735</u>
AMRO-8600, Publications	8,735	-	-	8,735
<u>Other Technological Resources</u>	<u>38,065</u>	<u>45,000</u>	<u>25,000</u>	<u>108,065</u>
Brazil-8700, Latin American Center of Educational Technology for Health	38,065	45,000	25,000	108,065
<u>Research Coordination</u>	<u>-</u>	<u>21,000</u>	<u>7,000</u>	<u>28,000</u>
AMRO-8900, Coordination of International Research	-	1,000	7,000	8,000
AMRO-8901, PAHO Research Grant Program	-	20,000	-	20,000
TOTAL	1,649,210	1,297,690	1,521,710	4,468,610

ANNEX 5

PROGRAM BUDGET - DETAIL BY FUND
PAHO REGULAR

1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		12,216,470	9,063,509	1,715,612	1,437,349	-
	SERVICES TO INDIVIDUALS	4,330,240	3,260,594	565,453	504,193	-
0000	PROGRAM PLANNING AND GENERAL ACTIVITIES	152,850	152,850	-	-	-
0100	COMMUNICABLE DISEASES	82,970	76,040	6,930	-	-
0200	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,098,695	998,190	23,520	76,985	-
0400	MALARIA	100,885	100,885	-	-	-
0500	TUBERCULOSIS	70,315	68,815	-	1,500	-
0700	LEPROSY	128,735	126,425	2,310	-	-
0900	AEDES AEGYPTI-BORNE DISEASES	44,795	-	-	44,795	-
1200	VECTOR BIOLOGY AND CONTROL	67,960	59,860	-	8,100	-
1300	OTHER COMMUNICABLE DISEASES	759,715	519,031	166,068	78,616	-
1400	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	1,316,840	714,078	328,565	294,197	-
1500	NUTRITION	32,735	80,455	11,700	-	-
1600	MENTAL HEALTH	206,300	196,680	9,620	-	-
1700	DENTAL HEALTH	187,945	171,205	16,740	-	-
	CHRONIC DISEASES					
	ENVIRONMENTAL HEALTH SERVICES	6,150,150	4,378,973	928,857	892,320	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,386,840	1,066,074	245,040	75,726	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	584,475	557,835	26,640	-	-
2300	ENVIRONMENTAL POLLUTION					
2400	PROGRAM PLANNING AND GENERAL ACTIVITIES	96,805	96,805	-	-	-
2500	AIR POLLUTION	8,510	2,700	5,810	-	-
2900	RADIATION AND ISOTOPES	110,750	110,750	-	-	-
3000	REGIONAL DEVELOPMENT	68,490	68,490	-	-	-
	OCCUPATIONAL HEALTH	19,090	4,700	14,390	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	306,510	280,330	26,180	-	-
3300	FOOT-AND-MOUTH DISEASE	2,431,790	1,347,168	455,541	629,081	-
3500	ZOOUSES	896,585	572,746	136,326	187,513	-
3600	QUALITY CONTROL OF FOODSTUFFS	148,100	148,100	-	-	-
3700	QUALITY CONTROL OF DRUGS	69,275	69,275	-	-	-
	PREVENTION OF ACCIDENTS	22,930	4,000	18,930	-	-
	COMPLEMENTARY SERVICES	1,736,080	1,473,942	221,302	40,836	-
4100	NURSING	634,635	572,565	62,070	-	-
4200	LABORATORIES	75,185	59,075	16,110	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	794,165	649,477	103,852	40,836	-
4400	HEALTH EDUCATION	48,975	48,975	-	-	-
4500	REHABILITATION	183,120	143,850	39,270	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		10,215,980	6,262,645	1,730,940	286,300	1,936,095
	HEALTH SYSTEMS	6,287,530	4,935,125	467,010	-	885,395
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,824,090	1,451,185	-	-	372,905
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,193,105	978,715	214,390	-	-
5200	MEDICAL CARE SYSTEMS	627,605	564,165	63,440	-	-
5300	PLANNING	414,030	388,620	25,410	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	1,582,330	940,460	129,360	-	512,490
5500	MANAGEMENT SYSTEMS	646,370	611,960	34,410	-	-
	DEVELOPMENT OF HUMAN RESOURCES	1,775,095	866,710	908,385	-	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	751,965	255,310	496,655	-	-
6100	PUBLIC HEALTH	99,860	30,800	59,060	-	-
6200	MEDICINE	368,740	262,560	106,180	-	-
6300	NURSING	228,955	174,865	54,090	-	-
6400	ENVIRONMENTAL SCIENCES	171,145	101,875	69,270	-	-
6500	VETERINARY MEDICINE	65,900	5,100	59,800	-	-
6600	DENTISTRY	91,150	27,300	63,850	-	-
6700	BIOSTATISTICS	2,700	2,700	-	-	-
6900	OTHER	5,510	3,200	2,310	-	-
	PHYSICAL RESOURCES	154,660	144,420	10,240	-	-
7300	PRODUCTION OF BIOLOGICALS	15,060	15,060	-	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	139,600	129,360	10,240	-	-
7800	FINANCIAL RESOURCES	57,675	57,675	-	-	-
	TECHNOLOGICAL RESOURCES	1,616,410	258,715	306,995	-	1,050,700
8000	PROGRAM PLANNING AND GENERAL ACTIVITIES	107,595	100,595	7,000	-	-
8100	TEXTBOOKS AND OTHER TEACHING MATERIALS	100,000	-	100,000	-	-
8500	MEDICAL TEXTBOOKS	310,410	-	199,995	-	110,415
8600	REGIONAL LIBRARIES	340,285	-	-	-	940,285
8700	EDITORIAL SERVICES	158,120	158,120	-	-	-
8900	OTHER TECHNOLOGICAL RESOURCES					
	RESEARCH COORDINATION	324,610	-	38,310	286,300	-
III. ADMINISTRATIVE DIRECTION		5,400,080	-	52,500	-	5,347,580
9100	EXECUTIVE AND TECHNICAL DIRECTION	567,735	-	-	-	567,735
9200	PROGRAM SERVICES	319,385	-	-	-	319,385
9300	ADMINISTRATIVE SERVICES	3,072,200	-	52,500	-	3,019,700
9400	GENERAL EXPENSES	1,440,760	-	-	-	1,440,760
9500	IV. GOVERNING BODIES	385,885	-	-	-	385,885
9600	V. INCREASE TO ASSETS	650,000	-	-	-	650,000
	GRAND TOTAL	28,868,415	15,326,154	3,499,052	1,723,649	8,319,560
	PER CENT OF TOTAL	100.0	53.1	12.1	6.0	28.8

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
PAHO REGULAR

1978

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		13,445,210	9,912,137	1,943,452	1,589,621	-
	SERVICES TO INDIVIDUALS	4,798,935	3,623,387	629,558	549,990	-
0000	PROGRAM PLANNING AND GENERAL ACTIVITIES	161,220	161,220	-	-	-
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	91,445	80,980	10,465	-	-
0200	MALARIA	1,144,260	1,046,295	19,430	78,535	-
0400	TUBERCULOSIS	111,935	111,935	-	-	-
0500	LEPROSY	85,200	72,200	11,500	1,500	-
0700	AEDES AEGYPTI-BORNE DISEASES	164,900	159,990	5,310	-	-
0900	VECTOR BIOLOGY AND CONTROL	58,515	-	-	58,515	-
1200	OTHER COMMUNICABLE DISEASES	78,950	64,640	5,310	9,000	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	858,925	576,350	198,575	84,000	-
1400	NUTRITION	1,429,740	778,602	336,698	314,440	-
1500	MENTAL HEALTH	161,610	148,610	13,000	-	-
1600	DENTAL HEALTH	256,090	242,780	13,310	-	-
1700	CHRONIC DISEASES	196,145	180,185	15,960	-	-
	ENVIRONMENTAL HEALTH SERVICES	6,634,340	4,626,025	1,032,681	975,634	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,460,250	1,069,111	308,301	82,838	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	579,775	561,845	17,930	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	156,555	153,900	2,655	-	-
2400	AIR POLLUTION	7,055	2,400	4,655	-	-
2500	RADIATION AND ISOTOPIES	125,710	125,710	-	-	-
2900	REGIONAL DEVELOPMENT	73,125	73,125	-	-	-
3000	OCCUPATIONAL HEALTH	18,045	3,000	15,045	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	290,215	272,515	17,700	-	-
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	2,671,175	1,495,298	493,869	682,008	-
3300	FOOT-AND-MOUTH DISEASE	1,004,680	636,486	157,406	210,788	-
3500	ZOOSES	156,280	156,280	-	-	-
3600	QUALITY CONTROL OF FOODSTUFFS	77,010	74,355	2,655	-	-
3700	QUALITY CONTROL OF DRUGS	14,465	2,000	12,465	-	-
	PREVENTION OF ACCIDENTS					
	COMPLEMENTARY SERVICES	2,011,935	1,662,725	281,213	67,997	-
4100	NURSING	749,795	682,165	67,630	-	-
4200	LABORATORIES	932,645	64,990	17,695	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	52,675	713,365	150,793	67,997	-
4400	HEALTH EDUCATION	194,665	149,530	45,135	-	-
4500	REHABILITATION					
II. DEVELOPMENT OF THE INFRASTRUCTURE		11,127,860	6,838,865	1,881,050	301,800	2,106,145
	HEALTH SYSTEMS	6,997,830	5,438,400	562,235	-	997,195
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,984,585	1,546,120	-	-	438,465
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,395,590	1,163,840	231,750	-	-
5200	MEDICAL CARE SYSTEMS	692,585	607,130	85,455	-	-
5300	PLANNING	473,955	443,035	30,920	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	1,741,295	1,013,305	169,260	-	558,730
5500	MANAGEMENT SYSTEMS	709,820	664,970	44,850	-	-
	DEVELOPMENT OF HUMAN RESOURCES	1,824,255	889,905	934,350	-	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	839,175	298,460	540,715	-	-
6100	PUBLIC HEALTH	83,145	29,600	53,545	-	-
6200	MEDICINE	356,430	245,800	110,630	-	-
6300	NURSING	223,280	167,235	56,045	-	-
6400	ENVIRONMENTAL SCIENCES	169,325	107,510	61,815	-	-
6500	VETERINARY MEDICINE	56,630	6,000	50,630	-	-
6600	DENTISTRY	87,115	28,000	59,115	-	-
6700	BIOSTATISTICS	3,000	3,000	-	-	-
6900	OTHER	6,155	3,500	2,655	-	-
	PHYSICAL RESOURCES	211,435	190,080	21,355	-	-
7300	PRODUCTION OF BIOLOGICALS	83,840	66,140	17,700	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	127,595	123,940	3,655	-	-
7800	FINANCIAL RESOURCES	60,855	60,855	-	-	-
	TECHNOLOGICAL RESOURCES	1,693,030	259,625	324,455	-	1,108,950
8000	PROGRAM PLANNING AND GENERAL ACTIVITIES	115,115	107,115	8,000	-	-
8100	TEXTBOOKS AND OTHER TEACHING MATERIALS	100,000	-	100,000	-	-
8500	MEDICAL LIBRARIES	331,095	-	213,800	-	117,295
8600	EDITORIAL SERVICES	991,655	-	-	-	991,655
8700	OTHER TECHNOLOGICAL RESOURCES	155,165	152,510	2,655	-	-
8900	RESEARCH COORDINATION	340,455	-	38,655	301,800	-
III. ADMINISTRATIVE DIRECTION		5,693,785	-	55,125	-	5,638,660
9100	EXECUTIVE AND TECHNICAL DIRECTION	677,790	-	-	-	677,790
9200	PROGRAM SERVICES	338,585	-	-	-	338,585
9300	ADMINISTRATIVE SERVICES	3,281,000	-	55,125	-	3,225,875
9400	GENERAL EXPENSES	1,396,410	-	-	-	1,396,410
9500	IV. GOVERNING BODIES	411,035	-	-	-	411,035
9600	V. INCREASE TO ASSETS	500,000	-	-	-	500,000
	GRAND TOTAL	31,177,890	16,751,002	3,879,627	1,891,421	8,655,840
	PER CENT OF TOTAL	100.0	53.7	12.4	6.1	27.9

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
PAHO REGULAR

1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		14,266,135	10,438,992	2,101,560	1,725,583	-
	SERVICES TO INDIVIDUALS	5,017,715	3,741,910	653,604	622,201	-
0000	PROGRAM PLANNING AND GENERAL ACTIVITIES	169,750	169,750	-	-	-
0100	COMMUNICABLE DISEASES	95,260	86,080	9,180	-	-
0200	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,160,600	1,050,350	21,860	88,390	-
0400	TUBERCULOSIS	122,055	122,055	-	-	-
0500	LEPROSY	88,655	72,655	11,500	4,500	-
0700	AEDES AEGYPTI-BORNE DISEASES	133,945	127,825	-	-	-
0900	VECTOR BIOLOGY AND CONTROL	87,165	-	-	61,165	-
1200	OTHER COMMUNICABLE DISEASES	87,160	70,870	6,120	10,200	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	984,300	628,942	221,060	134,298	-
1400	NUTRITION	1,502,840	829,483	349,709	323,648	-
1500	MENTAL HEALTH	118,855	115,455	3,400	-	-
1600	DENTAL HEALTH	286,425	275,205	11,220	-	-
1700	CHRONIC DISEASES	206,675	193,240	13,435	-	-
	ENVIRONMENTAL HEALTH SERVICES	7,072,060	4,939,121	1,098,647	1,034,292	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,541,750	1,096,736	338,924	106,090	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	641,715	625,415	16,300	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	231,375	228,315	3,060	-	-
2400	AIR POLLUTION	8,060	5,000	3,060	-	-
2500	RADIATION AND ISOTOPES	133,980	133,880	-	-	-
2900	REGIONAL DEVELOPMENT	81,660	81,660	-	-	-
3000	OCCUPATIONAL HEALTH	20,740	3,400	17,340	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	301,810	274,270	27,540	-	-
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	2,804,735	1,585,518	512,071	707,146	-
3300	FOOT-AND-MOUTH DISEASE	1,050,735	666,067	163,612	221,056	-
3500	ZOOSES	164,200	164,200	-	-	-
3600	QUALITY CONTROL OF FOODSTUFFS	77,720	74,660	3,060	-	-
3700	QUALITY CONTROL OF DRUGS	13,680	-	13,680	-	-
	PREVENTION OF ACCIDENTS					
	COMPLEMENTARY SERVICES	2,176,360	1,757,961	349,309	69,090	-
4100	NURSING	876,850	770,565	106,285	-	-
4200	LABORATORIES	88,120	68,460	19,660	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	93,145	74,571	18,284	69,090	-
4400	HEALTH EDUCATION	55,805	55,805	-	-	-
4500	REHABILITATION	172,440	117,360	55,080	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		12,195,515	7,350,290	2,195,565	310,280	2,339,380
	HEALTH SYSTEMS	7,681,465	5,814,430	742,060	-	1,124,975
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	2,127,370	1,650,455	-	-	476,915
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,698,990	1,354,450	344,540	-	-
5200	MEDICAL CARE SYSTEMS	719,600	591,400	128,200	-	-
5300	PLANNING	542,395	506,735	35,660	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	1,860,820	1,046,480	166,280	-	648,060
5500	MANAGEMENT SYSTEMS	732,290	664,910	67,380	-	-
	DEVELOPMENT OF HUMAN RESOURCES	2,032,920	1,003,095	1,029,825	-	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	981,665	363,990	617,675	-	-
6100	PUBLIC HEALTH	91,620	32,720	58,900	-	-
6200	MEDICINE	383,190	268,050	115,140	-	-
6300	NURSING	231,730	178,390	53,340	-	-
6400	ENVIRONMENTAL SCIENCES	182,425	114,645	67,780	-	-
6500	VETERINARY MEDICINE	62,560	6,800	55,760	-	-
6600	DENTISTRY	98,330	35,100	63,230	-	-
6700	BIOSTATISTICS	3,400	3,400	-	-	-
	PHYSICAL RESOURCES	194,795	181,555	13,240	-	-
7300	PRODUCTION OF BIOLOGICALS	60,450	51,270	9,180	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	134,345	130,285	4,060	-	-
7800	FINANCIAL RESOURCES	64,260	64,260	-	-	-
	TECHNOLOGICAL RESOURCES	1,872,735	286,950	371,380	-	1,214,405
8000	PROGRAM PLANNING AND GENERAL ACTIVITIES	128,850	120,850	8,000	-	-
8100	TEXTBOOKS AND OTHER TEACHING MATERIALS	100,000	-	100,000	-	-
8500	MEDICAL TEXTBOOKS	372,235	-	237,880	-	134,355
8600	EDITORIAL SERVICES	1,080,050	-	-	-	1,080,050
8700	OTHER TECHNOLOGICAL RESOURCES	191,600	166,100	25,500	-	-
8900	RESEARCH COORDINATION	349,340	-	39,060	310,280	-
III. ADMINISTRATIVE DIRECTION		6,265,720	-	57,880	-	6,207,840
9100	EXECUTIVE AND TECHNICAL DIRECTION	796,880	-	-	-	796,880
9200	PROGRAM SERVICES	358,390	-	-	-	358,390
9300	ADMINISTRATIVE SERVICES	3,588,045	-	57,880	-	3,530,165
9400	GENERAL EXPENSES	1,522,405	-	-	-	1,522,405
9500	IV. GOVERNING BODIES	444,730	-	-	-	444,730
9600	V. INCREASE TO ASSETS	500,000	-	-	-	500,000
	GRAND TOTAL	33,672,100	17,789,282	4,355,005	2,035,863	9,491,950
	PER CENT OF TOTAL	100.0	52.9	12.9	6.0	28.2

ANNEX 5 . . . continued
PROGRAM BUDGET - DETAIL BY FUND
PAHO COMMUNITY WATER SUPPLY

1977 - 1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	I. PROGRAM OF SERVICES	1,498,025	1,433,976	64,049	-	-
	=====	=====	=====	=====	=====	=====
	ENVIRONMENTAL HEALTH SERVICES	1,498,025	1,433,976	64,049	-	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	272,650	243,250	29,400	-	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	1,225,375	1,190,726	34,649	-	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	1,498,025	1,433,976	64,049	-	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	95.7	4.3	.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	I. PROGRAM OF SERVICES	270,951	266,411	4,540	-	-
	=====	=====	=====	=====	=====	=====
	ENVIRONMENTAL HEALTH SERVICES	270,951	266,411	4,540	-	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	270,951	266,411	4,540	-	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	270,951	266,411	4,540	-	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	98.3	1.7	.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	I. PROGRAM OF SERVICES	57,617	57,617	-	-	-
	=====	=====	=====	=====	=====	=====
	ENVIRONMENTAL HEALTH SERVICES	57,617	57,617	-	-	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	57,617	57,617	-	-	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	57,617	57,617	-	-	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	100.0	.0	.0	.0

ANNEX 5 . . . continued
PROGRAM BUDGET - DETAIL BY FUND
INCAP REGULAR BUDGET
1977 - 1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	1. PROGRAM OF SERVICES	374,910	71,232	138,717	164,961	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	374,910	71,232	138,717	164,961	-
1400	NUTRITION	374,910	71,232	138,717	164,961	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	374,910	71,232	138,717	164,961	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	1. PROGRAM OF SERVICES	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	425,000	80,750	157,250	187,000	-
1400	NUTRITION	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	1. PROGRAM OF SERVICES	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	425,000	80,750	157,250	187,000	-
1400	NUTRITION	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	425,000	80,750	157,250	187,000	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
GRANTS AND OTHER CONTRIBUTIONS TO INCAP

1977 - 1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	2,307,685	438,460	853,843	1,015,382	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	2,307,685	438,460	853,843	1,015,382	-
1400	NUTRITION	2,307,685	438,460	853,843	1,015,382	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	2,307,685	438,460	853,843	1,015,382	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	2,400,000	456,000	888,000	1,056,000	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	2,400,000	456,000	888,000	1,056,000	-
1400	NUTRITION	2,400,000	456,000	888,000	1,056,000	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	2,400,000	456,000	888,000	1,056,000	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	2,500,000	475,000	925,000	1,100,000	-
	=====	=====	=====	=====	=====	=====
	SERVICES TO INDIVIDUALS	2,500,000	475,000	925,000	1,100,000	-
1400	NUTRITION	2,500,000	475,000	925,000	1,100,000	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	2,500,000	475,000	925,000	1,100,000	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	19.0	37.0	44.0	.0

ANNEX 5 . . . continued
PROGRAM BUDGET - DETAIL BY FUND
GRANTS RELATED TO CAREC

1977 - 1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	903,771	492,454	268,612	134,305	8,400
	=====	=====	=====	=====	=====	=====
	COMPLEMENTARY SERVICES	903,771	492,454	268,612	134,305	8,400
4300	EPIDEMIOLOGICAL SURVEILLANCE	903,771	492,454	268,612	134,305	8,400
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	903,771	492,454	268,612	134,305	8,400
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	54.5	29.7	14.9	.9

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	608,555	329,207	179,566	89,782	10,000
	=====	=====	=====	=====	=====	=====
	COMPLEMENTARY SERVICES	608,555	329,207	179,566	89,782	10,000
4300	EPIDEMIOLOGICAL SURVEILLANCE	608,555	329,207	179,566	89,782	10,000
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	608,555	329,207	179,566	89,782	10,000
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	54.1	29.5	14.8	1.6

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	548,190	301,505	164,457	82,228	-
	=====	=====	=====	=====	=====	=====
	COMPLEMENTARY SERVICES	548,190	301,505	164,457	82,228	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	548,190	301,505	164,457	82,228	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	548,190	301,505	164,457	82,228	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	55.0	30.0	15.0	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
GRANTS AND OTHER CONTRIBUTIONS TO PAHO

1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		4,997,827	3,033,774	1,021,308	862,659	80,086
	SERVICES TO INDIVIDUALS	847,324	342,636	159,692	281,446	23,550
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	2,786	-	2,786	-	-
0200	MALARIA	122,260	-	-	122,260	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	24,056	19,470	4,586	-	-
1400	NUTRITION	419,312	294,737	124,575	-	-
1500	MENTAL HEALTH	102,635	67,135	-	35,500	-
1600	DENTAL HEALTH	1,294	-	-	-	-
1700	CHRONIC DISEASES	174,981	-	27,745	123,686	23,550
	ENVIRONMENTAL HEALTH SERVICES	3,561,293	2,470,751	814,467	219,539	56,536
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	190,183	82,583	66,563	38,037	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	187,005	5,261	181,744	-	-
2300	ENVIRONMENTAL POLLUTION					
	PROGRAM PLANNING AND GENERAL ACTIVITIES	99,998	88,695	-	11,303	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,726,862	1,345,949	341,625	-	39,288
3300	FOOT-AND-MOUTH DISEASE	655,305	487,305	123,760	26,992	17,248
3300	ZOOUSES	607,380	363,398	100,775	143,207	-
3500	QUALITY CONTROL OF FOODSTUFFS	94,560	94,560	-	-	-
	COMPLEMENTARY SERVICES	589,210	180,387	47,149	361,674	-
4100	NURSING	124,024	124,024	-	-	-
4200	LABORATORIES	103,512	56,363	47,149	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	361,674	-	-	361,674	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		4,401,662	2,068,028	1,935,154	-	398,480
	HEALTH SYSTEMS	2,933,709	1,540,183	1,037,949	-	355,577
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,660,970	859,842	611,475	-	189,653
5200	MEDICAL CARE SYSTEMS	517,424	118,860	337,464	-	61,100
5300	PLANNING	188,006	149,952	16,934	-	21,120
5500	MANAGEMENT SYSTEMS	567,309	411,529	72,076	-	83,704
	DEVELOPMENT OF HUMAN RESOURCES	661,779	458,236	160,640	-	42,903
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	594,957	458,236	83,818	-	42,903
6900	OTHER	76,822	-	76,822	-	-
	PHYSICAL RESOURCES	82,677	69,609	13,068	-	-
7300	PRODUCTION OF BIOLOGICALS	34,400	34,400	-	-	-
	TECHNOLOGICAL RESOURCES	723,497	-	723,497	-	-
8500	REGIONAL LIBRARIES	723,497	-	723,497	-	-
	GRAND TOTAL	9,399,489	5,101,802	2,956,462	862,659	478,566
	PER CENT OF TOTAL	100.0	54.2	31.5	9.2	5.1

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
GRANTS AND OTHER CONTRIBUTIONS TO PAHO

1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
1.	PROGRAM OF SERVICES	1,935,301	1,366,477	249,393	275,974	43,457
	SERVICES TO INDIVIDUALS	348,491	235,236	9,000	80,706	23,549
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	15,000	15,000	-	-	-
1400	NUTRITION	211,158	206,158	5,000	-	-
1500	MENTAL HEALTH	14,078	14,078	-	-	-
1700	CHRONIC DISEASES	108,255	-	4,000	80,706	23,549
	ENVIRONMENTAL HEALTH SERVICES	1,549,050	1,093,481	240,393	195,268	19,908
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	104,340	41,737	41,737	20,866	-
2300	ENVIRONMENTAL POLLUTION	90,000	90,000	-	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	546,670	470,740	75,930	-	-
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	162,108	142,200	-	-	19,908
3300	FOOT-AND-MOUTH DISEASE	645,932	348,804	122,726	174,402	-
	ZOOZOSES	-	-	-	-	-
	COMPLEMENTARY SERVICES	37,760	37,760	-	-	-
4100	NURSING	37,760	37,760	-	-	-
11.	DEVELOPMENT OF THE INFRASTRUCTURE	1,242,899	759,377	470,493	-	13,029
	HEALTH SYSTEMS	429,394	346,853	82,541	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	183,952	130,476	53,476	-	-
5300	PLANNING	107,682	107,682	-	-	-
5500	MANAGEMENT SYSTEMS	137,760	108,695	29,065	-	-
	DEVELOPMENT OF HUMAN RESOURCES	465,005	412,524	39,452	-	13,029
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	465,005	412,524	39,452	-	13,029
	TECHNOLOGICAL RESOURCES	348,500	-	348,500	-	-
8500	REGIONAL LIBRARIES	348,500	-	348,500	-	-
	GRAND TOTAL	3,178,200	2,125,854	719,886	275,974	56,486
	PER CENT OF TOTAL	100.0	66.8	22.7	8.7	1.8

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
1.	PROGRAM OF SERVICES	1,562,341	1,077,680	242,783	232,434	9,444
	SERVICES TO INDIVIDUALS	171,901	166,401	5,500	-	-
1400	NUTRITION	171,901	166,401	5,500	-	-
	ENVIRONMENTAL HEALTH SERVICES	1,390,440	911,279	237,283	232,434	9,444
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	113,168	39,609	45,268	28,291	-
2300	ENVIRONMENTAL POLLUTION	98,000	98,000	-	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	326,744	278,384	48,360	-	-
3200	PROGRAM PLANNING AND GENERAL ACTIVITIES	98,444	87,000	-	-	9,444
3300	FOOT-AND-MOUTH DISEASE	756,084	408,286	143,655	204,143	-
	ZOOZOSES	-	-	-	-	-
11.	DEVELOPMENT OF THE INFRASTRUCTURE	515,863	91,345	424,518	-	-
	HEALTH SYSTEMS	167,363	91,345	76,018	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	45,748	15,000	30,748	-	-
5500	MANAGEMENT SYSTEMS	121,615	76,345	45,270	-	-
	TECHNOLOGICAL RESOURCES	348,500	-	348,500	-	-
8500	REGIONAL LIBRARIES	348,500	-	348,500	-	-
	GRAND TOTAL	2,078,204	1,169,025	667,301	232,434	9,444
	PER CENT OF TOTAL	100.0	56.2	32.1	11.2	.5

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

1977 - 1978

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	1,190,278	329,818	385,906	474,554	-
	SERVICES TO INDIVIDUALS	1,190,236	329,776	385,906	474,554	-
	COMMUNICABLE DISEASES					
0500	LEPROSY	3,363	3,363	-	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	138,669	111,098	23,592	3,979	-
1400	NUTRITION	989,705	196,530	362,314	430,861	-
1600	DENTAL HEALTH	58,499	18,785	-	39,714	-
	ENVIRONMENTAL HEALTH SERVICES	42	42	-	-	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	42	42	-	-	-
	II. DEVELOPMENT OF THE INFRASTRUCTURE	2,661,090	696,255	1,964,835	-	-
	HEALTH SYSTEMS	146,416	88,495	57,921	-	-
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	50,859	50,859	-	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	10,047	10,047	-	-	-
5200	MEDICAL CARE SYSTEMS	89,331	27,410	57,921	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	179	179	-	-	-
	DEVELOPMENT OF HUMAN RESOURCES	451,907	382,307	69,600	-	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	36,601	36,601	-	-	-
6100	PUBLIC HEALTH	250,000	204,000	46,000	-	-
6200	MEDICINE	6,655	6,655	-	-	-
6300	NURSING	23,274	23,274	-	-	-
6600	DENTISTRY	135,377	111,777	23,600	-	-
	TECHNOLOGICAL RESOURCES	2,062,767	225,453	1,837,314	-	-
	TEXTBOOKS AND OTHER TEACHING MATERIALS					
8100	MEDICAL TEXTBOOKS	1,623,035	35,365	1,587,670	-	-
8300	NURSING TEXTBOOKS	18,000	-	188,000	-	-
8400	OTHER	58,142	58,142	-	-	-
8700	OTHER TECHNOLOGICAL RESOURCES	193,590	131,946	61,644	-	-
	GRAND TOTAL	3,851,368	1,026,073	2,350,741	474,554	-
	PER CENT OF TOTAL	100.0	26.6	61.1	12.3	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	711,106	224,399	233,673	253,034	-
	SERVICES TO INDIVIDUALS	711,106	224,399	233,673	253,034	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	130,607	109,711	20,896	-	-
1400	NUTRITION	580,499	114,688	212,777	253,034	-
	II. DEVELOPMENT OF THE INFRASTRUCTURE	2,536,725	383,920	2,152,805	-	-
	HEALTH SYSTEMS	55,415	55,415	-	-	-
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	55,415	55,415	-	-	-
	DEVELOPMENT OF HUMAN RESOURCES	335,600	266,000	69,600	-	-
6100	PUBLIC HEALTH	250,000	204,000	46,000	-	-
6600	DENTISTRY	85,600	62,000	23,600	-	-
	TECHNOLOGICAL RESOURCES	2,145,710	62,505	2,083,205	-	-
	TEXTBOOKS AND OTHER TEACHING MATERIALS					
8100	MEDICAL TEXTBOOKS	1,845,710	37,155	1,808,555	-	-
8300	NURSING TEXTBOOKS	235,000	-	235,000	-	-
8700	OTHER TECHNOLOGICAL RESOURCES	65,000	25,350	39,650	-	-
	GRAND TOTAL	3,247,831	608,319	2,386,478	253,034	-
	PER CENT OF TOTAL	100.0	18.7	73.5	7.8	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
PAN AMERICAN HEALTH AND EDUCATION FOUNDATION

1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	I. PROGRAM OF SERVICES	402,769	175,066	117,149	110,554	-
	SERVICES TO INDIVIDUALS	402,769	175,066	117,149	110,554	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	151,508	127,327	24,181	-	-
1400	NUTRITION	251,261	47,739	92,968	110,554	-
	II. DEVELOPMENT OF THE INFRASTRUCTURE	2,703,549	298,928	2,404,621	-	-
	HEALTH SYSTEMS	60,427	60,427	-	-	-
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	60,427	60,427	-	-	-
	DEVELOPMENT OF HUMAN RESOURCES	265,600	194,000	71,600	-	-
6100	PUBLIC HEALTH	180,000	132,000	48,000	-	-
6600	DENTISTRY	85,600	62,000	23,600	-	-
	TECHNOLOGICAL RESOURCES	2,377,522	44,501	2,333,021	-	-
	TEXTBOOKS AND OTHER TEACHING MATERIALS					
8100	MEDICAL TEXTBOOKS	2,073,455	39,795	2,033,660	-	-
8300	NURSING TEXTBOOKS	292,000	-	292,000	-	-
8700	OTHER TECHNOLOGICAL RESOURCES	12,067	4,706	7,361	-	-
	GRAND TOTAL	3,106,318	473,994	2,521,770	110,554	-
	PER CENT OF TOTAL	100.0	15.3	81.1	3.6	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
NATURAL DISASTER RELIEF VOLUNTARY FUND

1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	II. DEVELOPMENT OF THE INFRASTRUCTURE	100,000	100,000	-	-	-
	HEALTH SYSTEMS	100,000	100,000	-	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	100,000	100,000	-	-	-
	GRAND TOTAL	100,000	100,000	-	-	-
	PER CENT OF TOTAL	100.0	100.0	.0	.0	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
WHO REGULAR

1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		6,063,300	4,619,421	809,305	634,574	-
	SERVICES TO INDIVIDUALS	2,838,600	2,019,405	332,000	487,195	-
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	243,675	186,935	56,740	-	-
0200	MALARIA	674,965	628,315	46,650	-	-
0400	TUBERCULOSIS	88,785	84,135	34,650	-	-
0500	LEPROSY	71,200	59,700	11,500	-	-
0600	VENEREAL DISEASES	8,900	5,430	3,500	-	-
0700	Aedes Aegypti-borne Diseases	253,450	253,450	-	-	-
0800	PARASITIC DISEASES	78,870	74,250	4,620	-	-
0900	VECTOR BIOLOGY AND CONTROL	519,340	123,840	-	395,900	-
1200	OTHER COMMUNICABLE DISEASES	91,300	74,300	17,000	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	380,170	249,856	74,263	56,051	-
1400	NUTRITION	281,240	212,759	33,237	35,244	-
1500	MENTAL HEALTH	70,345	56,865	22,480	-	-
1600	DENTAL HEALTH	39,630	26,300	12,930	-	-
1700	CHRONIC DISEASES	27,730	13,300	14,430	-	-
	ENVIRONMENTAL HEALTH SERVICES	1,919,645	1,487,433	325,607	106,605	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	888,610	701,525	133,105	53,980	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	21,670	16,360	5,310	-	-
2200	SOLID WASTES	27,335	27,335	-	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	97,965	90,965	7,000	-	-
2500	RADIATION AND ISOTOPES	14,935	12,935	2,000	-	-
3000	OCCUPATIONAL HEALTH	5,310	3,000	2,310	-	-
	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	436,600	397,340	39,260	-	-
3300	ZOOSES	231,975	117,148	62,202	52,625	-
3500	QUALITY CONTROL OF FOODSTUFFS	129,520	61,100	68,420	-	-
3600	QUALITY CONTROL OF DRUGS	53,625	53,625	-	-	-
3700	PREVENTION OF ACCIDENTS	12,100	6,100	6,000	-	-
	COMPLEMENTARY SERVICES	1,305,055	1,112,583	151,698	40,774	-
4100	NURSING	541,960	489,470	52,490	-	-
4200	LABORATORIES	159,645	137,165	22,480	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	431,305	332,283	58,248	40,774	-
4400	HEALTH EDUCATION	79,105	69,865	9,240	-	-
4500	REHABILITATION	93,040	83,800	9,240	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		5,003,940	3,287,020	1,290,310	60,455	366,155
	HEALTH SYSTEMS	3,243,990	2,581,090	470,045	25,055	167,800
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	795,545	777,075	18,470	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,346,530	946,815	399,715	-	-
5200	MEDICAL CARE SYSTEMS	147,135	134,045	13,090	-	-
5300	PLANNING	140,840	129,840	20,000	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	639,015	456,850	9,310	25,055	167,800
5500	MANAGEMENT SYSTEMS	174,925	165,465	9,460	-	-
	DEVELOPMENT OF HUMAN RESOURCES	1,368,280	611,055	721,825	35,400	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	482,600	281,305	401,295	-	-
6100	PUBLIC HEALTH	102,660	59,200	43,460	-	-
6200	MEDICINE	78,460	39,040	39,420	-	-
6300	NURSING	159,480	72,960	71,500	15,000	-
6400	ENVIRONMENTAL SCIENCES	79,020	34,200	44,820	-	-
6500	VETERINARY MEDICINE	64,650	20,500	44,490	-	-
6600	DENTISTRY	81,590	53,100	28,490	-	-
6900	OTHER	119,800	51,050	48,350	20,400	-
	PHYSICAL RESOURCES	90,025	73,475	16,550	-	-
7300	PRODUCTION OF BIOLOGICALS	82,325	70,775	11,550	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	7,700	2,700	5,000	-	-
7800	FINANCIAL RESOURCES	12,200	12,200	-	-	-
	TECHNOLOGICAL RESOURCES	289,445	9,200	81,890	-	198,355
8500	REGIONAL LIBRARIES	109,370	6,500	61,870	-	41,000
8600	EDITORIAL SERVICES	157,355	-	-	-	157,355
8700	OTHER TECHNOLOGICAL RESOURCES	22,720	2,700	20,020	-	-
III. ADMINISTRATIVE DIRECTION		1,578,825	-	-	-	1,578,825
9100	EXECUTIVE AND TECHNICAL DIRECTION	76,140	-	-	-	76,140
9200	PROGRAM SERVICES	143,485	-	-	-	143,485
9300	ADMINISTRATIVE SERVICES	806,120	-	-	-	806,120
9400	GENERAL EXPENSES	553,080	-	-	-	553,080
9500	IV. GOVERNING BODIES	167,935	-	-	-	167,935
	GRAND TOTAL	12,814,000	7,906,441	2,099,615	695,029	2,112,915
	PER CENT OF TOTAL	100.0	61.7	16.4	5.4	16.5

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
WHO REGULAR

1978

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		6,653,465	5,117,414	883,056	652,995	-
	SERVICES TO INDIVIDUALS	3,046,570	2,195,883	338,539	512,148	-
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	281,810	215,100	66,710	-	-
0200	MALARIA	707,125	675,035	32,090	-	-
0400	TUBERCULOSIS	91,700	51,615	40,085	-	-
0500	LEPROSY	64,200	64,200	-	-	-
0600	VENEREAL DISEASES	9,500	6,000	3,500	-	-
0700	Aedes Aegypti-borne DISEASES	237,465	237,465	-	-	-
0800	PARASITIC DISEASES	90,320	85,010	5,310	-	-
0900	VECTOR BIOLOGY AND CONTROL	546,285	133,040	-	413,245	-
1200	OTHER COMMUNICABLE DISEASES	98,550	81,350	17,200	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	455,010	312,479	78,872	63,659	-
1400	NUTRITION	308,775	241,239	32,292	35,244	-
1500	MENTAL HEALTH	95,190	24,450	27,740	-	-
1600	DENTAL HEALTH	35,830	14,400	21,430	-	-
1700	CHRONIC DISEASES	24,810	11,500	13,310	-	-
	ENVIRONMENTAL HEALTH SERVICES	2,233,800	1,703,400	407,267	123,133	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,005,855	758,226	180,026	67,603	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	24,950	17,640	7,310	-	-
2200	SOLID WASTES	44,200	44,200	-	-	-
2300	ENVIRONMENTAL POLLUTION					
2500	PROGRAM PLANNING AND GENERAL ACTIVITIES	170,580	163,580	7,000	-	-
2600	RADIATION AND ISOTOPES	13,590	10,935	2,655	-	-
3000	OCCUPATIONAL HEALTH	5,655	3,000	2,655	-	-
3100	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3300	PROGRAM PLANNING AND GENERAL ACTIVITIES	493,085	439,720	53,365	-	-
3500	ZOOSES	252,445	123,559	73,362	55,530	-
3600	QUALITY CONTROL OF FOODSTUFFS	140,100	68,200	71,900	-	-
3700	QUALITY CONTROL OF DRUGS	67,340	67,340	-	-	-
	PREVENTION OF ACCIDENTS	16,000	7,000	9,000	-	-
	COMPLEMENTARY SERVICES	1,373,095	1,218,131	137,250	17,714	-
4100	NURSING	591,135	535,390	55,745	-	-
4200	LABORATORIES	181,130	155,660	25,470	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	434,085	384,231	32,140	17,714	-
4400	HEALTH EDUCATION	87,270	78,650	10,620	-	-
4500	REHABILITATION	79,475	66,200	13,275	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		5,384,935	3,555,890	1,380,520	60,175	388,350
	HEALTH SYSTEMS	3,551,450	2,847,260	501,665	24,175	178,350
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	935,430	913,695	21,735	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,403,400	973,505	429,895	-	-
5200	MEDICAL CARE SYSTEMS	183,865	156,740	27,125	-	-
5300	PLANNING	153,110	148,110	5,000	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	665,390	450,710	12,159	24,175	178,350
5500	MANAGEMENT SYSTEMS	210,255	204,500	5,755	-	-
	DEVELOPMENT OF HUMAN RESOURCES	1,415,290	618,580	760,710	36,000	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	701,240	284,035	417,205	-	-
6100	PUBLIC HEALTH	111,030	63,200	47,830	-	-
6200	MEDICINE	100,555	58,000	44,555	-	-
6300	NURSING	167,790	79,110	73,680	15,000	-
6400	ENVIRONMENTAL SCIENCES	83,970	38,100	45,870	-	-
6500	VETERINARY MEDICINE	70,190	22,500	47,690	-	-
6600	DENTISTRY	57,440	28,235	29,205	-	-
6900	OTHER	123,075	47,400	54,675	21,000	-
	PHYSICAL RESOURCES	81,915	68,950	12,965	-	-
7300	PRODUCTION OF BIOLOGICALS	73,915	65,950	7,965	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	8,000	3,000	5,000	-	-
7600	FINANCIAL RESOURCES	13,100	13,100	-	-	-
	TECHNOLOGICAL RESOURCES	323,180	8,000	105,180	-	210,000
8500	REGIONAL LIBRARIES	130,270	5,000	82,170	-	43,100
8600	EDITORIAL SERVICES	166,900	-	-	-	166,900
8700	OTHER TECHNOLOGICAL RESOURCES	26,010	3,000	23,010	-	-
III. ADMINISTRATIVE DIRECTION		1,753,535	-	-	-	1,753,535
9100	EXECUTIVE AND TECHNICAL DIRECTION	77,645	-	-	-	77,645
9200	PROGRAM SERVICES	153,915	-	-	-	153,915
9300	ADMINISTRATIVE SERVICES	874,310	-	-	-	874,310
9400	GENERAL EXPENSES	647,665	-	-	-	647,665
9500	IV. GOVERNING BODIES	177,065	-	-	-	177,065
	GRAND TOTAL	13,969,000	8,673,304	2,263,576	713,170	2,318,950
	PER CENT OF TOTAL	100.0	62.1	16.2	5.1	16.6

ANNEX 5 . . . continued
PROGRAM BUDGET - DETAIL BY FUND
WHO REGULAR

1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
I. PROGRAM OF SERVICES		7,430,285	5,818,611	942,552	669,122	-
	SERVICES TO INDIVIDUALS	3,314,465	2,485,925	327,633	500,907	-
	COMMUNICABLE DISEASES					
0100	PROGRAM PLANNING AND GENERAL ACTIVITIES	317,720	238,220	79,500	-	-
0200	MALARIA	738,060	729,740	8,320	-	-
0400	TUBERCULOSIS	117,220	71,100	46,120	-	-
0500	LEPROSY	69,400	69,400	-	-	-
0600	VENEREAL DISEASES	10,350	6,800	3,550	-	-
0700	Aedes Aegypti-BORNE DISEASES	293,430	293,430	-	-	-
0800	PARASITIC DISEASES	93,580	84,400	9,180	-	-
0900	VECTOR BIOLOGY AND CONTROL	585,585	142,240	-	443,325	-
1200	OTHER COMMUNICABLE DISEASES	109,740	89,240	20,500	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	409,730	352,875	56,238	20,622	-
1400	NUTRITION	325,725	254,625	34,140	36,960	-
1500	MENTAL HEALTH	173,710	143,040	30,670	-	-
1600	DENTAL HEALTH	35,750	12,700	23,050	-	-
1700	CHRONIC DISEASES	34,415	10,100	16,315	-	-
	ENVIRONMENTAL HEALTH SERVICES	2,591,445	1,982,768	459,309	149,368	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,149,635	851,876	206,698	91,061	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	26,930	19,020	7,810	-	-
2200	SOLID WASTES	47,700	47,700	-	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	310,860	295,860	15,000	-	-
2500	RADIATION AND ISOTOPES	20,080	17,020	3,060	-	-
3000	OCCUPATIONAL HEALTH	6,310	1,000	5,310	-	-
	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	537,850	469,710	68,140	-	-
3300	ZOOSES	261,790	128,912	74,571	58,307	-
3500	QUALITY CONTROL OF FOODSTUFFS	151,620	72,900	78,720	-	-
3600	QUALITY CONTROL OF DRUGS	71,970	71,970	-	-	-
3700	PREVENTION OF ACCIDENTS	6,800	6,800	-	-	-
	COMPLEMENTARY SERVICES	1,524,375	1,349,918	155,610	18,847	-
4100	NURSING	680,910	593,075	57,835	-	-
4200	LABORATORIES	138,950	169,640	29,890	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	479,595	425,923	34,825	18,847	-
4400	HEALTH EDUCATION	94,320	82,040	12,240	-	-
4500	REHABILITATION	100,600	79,180	21,420	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		5,767,210	3,799,790	1,506,275	101,850	359,295
	HEALTH SYSTEMS	3,921,445	3,095,425	612,995	66,050	146,975
5000	PROGRAM PLANNING AND GENERAL ACTIVITIES	1,045,210	1,009,710	35,500	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	1,640,415	1,092,080	548,335	-	-
5200	MEDICAL CARE SYSTEMS	172,650	158,370	14,280	-	-
5300	PLANNING	164,910	158,850	6,060	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	67,240	48,815	18,425	66,050	146,975
5500	MANAGEMENT SYSTEMS	226,720	217,900	8,820	-	-
	DEVELOPMENT OF HUMAN RESOURCES	1,453,025	612,005	805,220	35,800	-
6000	PROGRAM PLANNING AND GENERAL ACTIVITIES	696,115	262,450	433,665	-	-
6100	PUBLIC HEALTH	118,060	66,100	51,960	-	-
6200	MEDICINE	113,470	60,050	53,420	-	-
6300	NURSING	184,495	85,875	83,620	15,000	-
6400	ENVIRONMENTAL SCIENCES	102,435	42,550	59,885	-	-
6500	VETERINARY MEDICINE	67,110	24,900	42,210	-	-
6600	DENTISTRY	47,570	17,990	29,580	-	-
6900	OTHER	123,770	52,090	50,880	20,800	-
	PHYSICAL RESOURCES	87,120	72,940	14,180	-	-
7300	PRODUCTION OF BIOLOGICALS	78,720	69,540	9,180	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	8,400	3,400	5,000	-	-
7800	FINANCIAL RESOURCES	14,020	14,020	-	-	-
	TECHNOLOGICAL RESOURCES	291,600	5,400	73,880	-	212,320
8500	REGIONAL LIBRARIES	114,680	5,400	73,880	-	35,400
8600	EDITORIAL SERVICES	176,920	-	-	-	176,920
III. ADMINISTRATIVE DIRECTION		1,826,405	-	-	-	1,826,405
9100	EXECUTIVE AND TECHNICAL DIRECTION	79,015	-	-	-	79,015
9200	PROGRAM SERVICES	165,045	-	-	-	165,045
9300	ADMINISTRATIVE SERVICES	965,425	-	-	-	965,425
9400	GENERAL EXPENSES	616,920	-	-	-	616,920
9500	IV. GOVERNING BODIES	202,100	-	-	-	202,100
	GRAND TOTAL	15,226,000	9,618,401	2,448,827	770,972	2,387,800
	PER CENT OF TOTAL	100.0	63.1	16.1	5.1	15.7

ANNEX 5 . . . continued
PROGRAM BUDGET - DETAIL BY FUND
UNITED NATIONS DEVELOPMENT PROGRAM

1977 - 1978

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		2,036,400	1,690,780	276,770	68,850	-
	SERVICES TO INDIVIDUALS	250,825	250,000	825	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	825	-	825	-	-
1400	NUTRITION	250,000	250,000	-	-	-
	ENVIRONMENTAL HEALTH SERVICES	1,733,092	1,433,705	230,537	68,850	-
2000	PROGRAM PLANNING AND GENERAL ACTIVITIES	125,300	91,675	33,625	-	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	330,742	315,902	14,840	-	-
2200	SOLID WASTES	32,000	32,000	-	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	517,100	377,977	87,373	52,650	-
3000	OCCUPATIONAL HEALTH	51,000	44,500	6,500	-	-
	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	227,650	205,150	22,500	-	-
3200	FOOT-AND-MOUTH DISEASE	121,200	116,400	4,800	-	-
3300	ZOOSES	258,900	181,801	60,899	16,200	-
3500	QUALITY CONTROL OF FOODSTUFFS	69,200	69,200	-	-	-
	COMPLEMENTARY SERVICES	52,483	7,075	45,408	-	-
4500	REHABILITATION	52,483	7,075	45,408	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		1,723,887	1,453,829	270,058	-	-
	HEALTH SYSTEMS	452,254	401,554	50,700	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	230,380	222,380	8,000	-	-
5200	MEDICAL CARE SYSTEMS	101,120	68,620	32,500	-	-
5300	PLANNING	22,350	22,350	-	-	-
5400	STATISTICS AND INFORMATION SYSTEMS	64,537	57,337	7,200	-	-
	DEVELOPMENT OF HUMAN RESOURCES	730,860	567,065	163,795	-	-
6500	VETERINARY MEDICINE	342,720	237,190	105,530	-	-
6600	DENTISTRY	138,140	121,200	16,940	-	-
6900	OTHER	250,000	208,675	41,325	-	-
	PHYSICAL RESOURCES	540,773	485,210	55,563	-	-
7300	PRODUCTION OF BIOLOGICALS	403,815	362,010	41,805	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	136,958	123,200	13,758	-	-
	GRAND TOTAL	3,760,287	3,144,609	546,828	68,850	-
	PER CENT OF TOTAL	100.0	83.7	14.5	1.8	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		1,082,493	866,777	123,716	92,000	-
	SERVICES TO INDIVIDUALS	50,000	30,000	20,000	-	-
1600	DENTAL HEALTH	50,000	30,000	20,000	-	-
	ENVIRONMENTAL HEALTH SERVICES	995,493	809,777	93,716	92,000	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	23,860	23,860	-	-	-
2200	SOLID WASTES	50,000	50,000	-	-	-
	ENVIRONMENTAL POLLUTION					
2300	PROGRAM PLANNING AND GENERAL ACTIVITIES	188,516	58,500	38,016	92,000	-
	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH					
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	12,757	12,757	-	-	-
3200	FOOT-AND-MOUTH DISEASE	132,800	128,800	4,000	-	-
3300	ZOOSES	230,950	179,250	51,700	-	-
3600	QUALITY CONTROL OF DRUGS	356,610	356,610	-	-	-
	COMPLEMENTARY SERVICES	37,000	27,000	10,000	-	-
4300	EPIDEMIOLOGICAL SURVEILLANCE	37,000	27,000	10,000	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		1,581,487	1,295,088	286,399	-	-
	HEALTH SYSTEMS	335,991	251,856	84,135	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	308,666	251,856	56,810	-	-
5200	MEDICAL CARE SYSTEMS	29,325	-	29,325	-	-
	DEVELOPMENT OF HUMAN RESOURCES	876,740	730,100	146,640	-	-
6500	VETERINARY MEDICINE	326,910	218,580	108,330	-	-
6600	DENTISTRY	108,730	107,520	1,210	-	-
6900	OTHER	441,100	404,000	37,100	-	-
	PHYSICAL RESOURCES	368,756	313,132	55,624	-	-
7300	PRODUCTION OF BIOLOGICALS	322,256	266,632	55,624	-	-
7400	MAINTENANCE OF HEALTH CARE FACILITIES	46,500	46,500	-	-	-
	GRAND TOTAL	2,663,980	2,161,865	410,115	92,000	-
	PER CENT OF TOTAL	100.0	81.1	15.4	3.5	.0

ANNEX 5 . . . continued
 PROGRAM BUDGET - DETAIL BY FUND
 UNITED NATIONS DEVELOPMENT PROGRAM

1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
I. PROGRAM OF SERVICES		1,522,540	1,667,830	191,710	63,000	-
	SERVICES TO INDIVIDUALS	80,000	65,000	15,000	-	-
1600	DENTAL HEALTH	80,000	65,000	15,000	-	-
	ENVIRONMENTAL HEALTH SERVICES	1,819,540	1,594,830	171,710	63,000	-
2100	WATER SUPPLY AND EXCRETA DISPOSAL	75,000	75,000	-	-	-
2200	SOLID WASTES	100,000	100,000	-	-	-
2300	ENVIRONMENTAL POLLUTION	126,000	63,000	-	63,000	-
3100	PROGRAM PLANNING AND GENERAL ACTIVITIES	179,780	165,320	14,460	-	-
3200	ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	155,850	147,420	8,430	-	-
3300	PROGRAM PLANNING AND GENERAL ACTIVITIES	800,000	665,600	134,400	-	-
3600	FOOT-AND-MOUTH DISEASE	382,910	368,490	14,420	-	-
	ZOOSES					
	QUALITY CONTROL OF DRUGS	23,000	18,000	5,000	-	-
4300	COMPLEMENTARY SERVICES	23,000	18,000	5,000	-	-
	EPIDEMIOLOGICAL SURVEILLANCE	1,051,445	828,955	222,490	-	-
II. DEVELOPMENT OF THE INFRASTRUCTURE		260,000	219,500	40,500	-	-
	HEALTH SYSTEMS	260,000	219,500	40,500	-	-
5100	GENERAL PUBLIC HEALTH SYSTEMS	574,525	424,335	150,190	-	-
	DEVELOPMENT OF HUMAN RESOURCES	272,025	154,335	117,690	-	-
6500	VETERINARY MEDICINE	302,500	270,000	32,500	-	-
6900	OTHER	216,920	185,120	31,800	-	-
	PHYSICAL RESOURCES	216,920	185,120	31,800	-	-
7300	PRODUCTION OF BIOLOGICALS	2,973,985	2,496,785	414,200	63,000	-
	GRAND TOTAL	100.0	84.0	13.9	2.1	.0
	PER CENT OF TOTAL					

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
UNITED NATIONS FUND FOR POPULATION ACTIVITIES

1977 - 1978 - 1979

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	6,508,463	5,219,523	1,288,940	-	-
	SERVICES TO INDIVIDUALS	6,508,463	5,219,523	1,288,940	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	6,508,463	5,219,523	1,288,940	-	-
	GRAND TOTAL	6,508,463	5,219,523	1,288,940	-	-
	PER CENT OF TOTAL	100.0	80.2	19.8	.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1978	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	4,874,279	4,026,460	847,819	-	-
	SERVICES TO INDIVIDUALS	4,874,279	4,026,460	847,819	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	4,874,279	4,026,460	847,819	-	-
	GRAND TOTAL	4,874,279	4,026,460	847,819	-	-
	PER CENT OF TOTAL	100.0	82.6	17.4	.0	.0

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1979	TOTAL	ADVISORY SERVICES	DEVELOPMENT OF HUMAN RESOURCES	RESEARCH	OTHER PROGRAM SERVICES
		\$	\$	\$	\$	\$
	I. PROGRAM OF SERVICES	3,352,803	2,778,887	573,916	-	-
	SERVICES TO INDIVIDUALS	3,352,803	2,778,887	573,916	-	-
1300	MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	3,352,803	2,778,887	573,916	-	-
	GRAND TOTAL	3,352,803	2,778,887	573,916	-	-
	PER CENT OF TOTAL	100.0	82.9	17.1	.0	.0

ANNEX 5 . . . continued

PROGRAM BUDGET - DETAIL BY FUND
WHO GRANTS AND OTHER CONTRIBUTIONS

1977

PROGRAM CLASSIFICATION	PROGRAM BUDGET - DETAIL 1977	TOTAL \$	ADVISORY SERVICES \$	DEVELOPMENT OF HUMAN RESOURCES \$	RESEARCH \$	OTHER PROGRAM SERVICES \$
	I. PROGRAM OF SERVICES	15,637	9,775	5,862	-	-
	=====	=====	=====	=====	=====	=====
	ENVIRONMENTAL HEALTH SERVICES	5,862	-	5,862	-	-
2300	ENVIRONMENTAL POLLUTION PROGRAM PLANNING AND GENERAL ACTIVITIES	5,862	-	5,862	-	-
	=====	=====	=====	=====	=====	=====
	COMPLEMENTARY SERVICES	9,775	9,775	-	-	-
4400	HEALTH EDUCATION	9,775	9,775	-	-	-
	=====	=====	=====	=====	=====	=====
	GRAND TOTAL	15,637	9,775	5,862	-	-
	=====	=====	=====	=====	=====	=====
	PER CENT OF TOTAL	100.0	62.5	37.5	.0	.0

ANNEX 6
PROGRAM BUDGET
DETAIL BY AREA OF TECHNICAL COOPERATION
DISEASE CONTROL

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	15,476,324	95.2	13,746,207	96.1	14,807,912	97.2
SERVICES TO INDIVIDUALS	4,221,030	26.2	4,272,480	29.7	4,410,470	29.0
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES	76,925	.5	81,110	.6	85,375	.6
COMMUNICABLE DISEASES						
0100 PROGRAM PLANNING AND GENERAL ACTIVITIES	329,431	2.0	373,255	2.6	412,980	2.7
0200 MALARIA	1,895,920	11.7	1,851,385	12.9	1,898,660	12.5
0400 TUBERCULOSIS	189,670	1.2	203,635	1.4	239,275	1.6
0500 LEPROSY	144,878	.9	149,400	1.0	158,055	1.0
0600 VENEREAL DISEASES	8,900	.1	9,500	.1	10,350	.1
0700 AEDES AEGYPTI-BORNE DISEASES	382,185	2.4	402,365	2.8	427,375	2.8
0800 PARASITIC DISEASES	78,870	.5	90,320	.6	93,580	.6
0900 VECTOR BIOLOGY AND CONTROL	564,335	3.5	604,800	4.2	646,750	4.2
1200 OTHER COMMUNICABLE DISEASES	159,260	1.0	177,500	1.2	196,980	1.3
1700 CHRONIC DISEASES	390,656	2.4	329,210	2.3	241,090	1.6
ENVIRONMENTAL HEALTH SERVICES	8,472,437	51.9	7,248,157	50.9	8,129,542	53.3
2300 ENVIRONMENTAL POLLUTION	7,400	*	8,000	.1	9,300	.1
PROGRAM PLANNING AND GENERAL ACTIVITIES						
3100 ANIMAL HEALTH AND VETERINARY PUBLIC HEALTH	2,697,622	16.5	1,342,727	9.4	1,346,184	8.8
3200 PROGRAM PLANNING AND GENERAL ACTIVITIES	3,208,295	19.6	2,966,083	20.8	3,057,029	20.0
3300 FOOT-AND-MOUTH DISEASE	1,994,840	12.3	2,134,007	15.0	2,968,609	18.8
3400 ZOOZOOSES	44,300	2.7	315,820	2.1	315,820	2.1
3500 QUALITY CONTROL OF FOODSTUFFS	122,900	.8	500,960	3.5	532,600	3.5
3600 QUALITY CONTROL OF DRUGS						
COMPLEMENTARY SERVICES	2,782,857	17.1	2,225,570	15.5	2,267,900	14.9
4200 LABORATORIES	338,342	2.1	263,775	1.8	287,070	1.9
4300 EPIDEMIOLOGICAL SURVEILLANCE	2,444,515	15.0	1,961,795	13.7	1,980,830	13.0
II. DEVELOPMENT OF THE INFRASTRUCTURE	786,751	4.8	553,326	3.9	435,115	2.6
HEALTH SYSTEMS	251,151	1.5	73,315	.5	79,025	.5
PHYSICAL RESOURCES	535,600	3.3	480,011	3.4	356,090	2.3
7300 PRODUCTION OF BIOLOGICALS	535,600	3.3	480,011	3.4	356,090	2.3
GRAND TOTAL	16,283,075	100.0	14,299,533	100.0	15,243,027	100.0
PERCENT OF TOTAL BUDGET	23.1		22.8		23.8	

*LESS THAN .05 PERCENT

FAMILY HEALTH

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	14,521,033	99.6	12,465,041	100.0	10,930,468	100.0
SERVICES TO INDIVIDUALS	14,427,253	99.0	12,381,901	99.4	10,854,183	99.3
0000 PROGRAM PLANNING AND GENERAL ACTIVITIES	75,925	.5	80,110	.6	84,375	.6
1300 MATERNAL AND CHILD HEALTH AND FAMILY WELFARE	7,811,898	53.6	6,333,821	50.9	4,898,341	44.8
1400 NUTRITION	5,959,692	40.9	5,355,172	43.0	5,176,377	47.3
1500 MENTAL HEALTH	274,215	1.9	270,878	2.2	292,565	2.7
1600 DENTAL HEALTH	305,523	2.1	341,920	2.7	402,175	3.7
ENVIRONMENTAL HEALTH SERVICES	35,030	.2	30,465	.2	20,480	.2
3700 PREVENTION OF ACCIDENTS	35,030	.2	30,465	.2	20,480	.2
COMPLEMENTARY SERVICES	58,750	.4	52,675	.4	55,805	.5
II. DEVELOPMENT OF THE INFRASTRUCTURE	65,477	.4	-	-	-	-
TECHNOLOGICAL RESOURCES	65,477	.4	-	-	-	-
8700 OTHER TECHNOLOGICAL RESOURCES	65,477	.4	-	-	-	-
GRAND TOTAL	14,586,510	100.0	12,465,041	100.0	10,930,468	100.0
PERCENT OF TOTAL BUDGET	20.7		19.8		17.1	

ANNEX 6 . . . continued

PROGRAM BUDGET
DETAIL BY AREA OF TECHNICAL COOPERATION

ENVIRONMENTAL HEALTH

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
1. PROGRAM OF SERVICES	6,304,482	100.0	4,345,022	100.0	4,718,770	100.0
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,807,423	44.5	2,310,455	57.7	2,742,243	58.1
2100 WATER SUPPLY AND EXCRETA DISPOSAL	2,849,309	37.3	899,536	20.7	801,162	17.0
2200 SOLID WASTES	59,335	.9	94,200	2.2	147,700	3.1
2300 ENVIRONMENTAL POLLUTION						
2400 PROGRAM PLANNING AND GENERAL ACTIVITIES	810,330	12.9	597,651	13.8	756,935	16.0
2500 AIR POLLUTION	8,510	.1	7,055	.2	8,060	.2
2600 RADIATION AND ISOTOPES	129,685	2.0	139,300	3.2	153,960	3.3
2900 REGIONAL DEVELOPMENT	68,490	1.1	73,125	1.7	81,660	1.7
3000 OCCUPATIONAL HEALTH	75,400	1.2	23,700	.5	27,050	.6
GRAND TOTAL	6,304,482	100.0	4,345,022	100.0	4,718,770	100.0
PERCENT OF TOTAL BUDGET	9.0		5.9		7.4	

HEALTH SERVICES

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
I. PROGRAM OF SERVICES	1,810,927	14.2	1,850,090	17.1	2,010,530	17.4
ENVIRONMENTAL HEALTH SERVICES	56,160	.4	59,990	.6	62,310	.5
2000 PROGRAM PLANNING AND GENERAL ACTIVITIES	56,160	.4	59,990	.6	62,310	.5
COMPLEMENTARY SERVICES	1,754,767	13.8	1,790,100	16.5	1,948,220	16.9
4100 NURSING	1,300,619	10.2	1,378,690	12.7	1,527,760	13.2
4300 EPIDEMIOLOGICAL SURVEILLANCE	46,400	.4	50,000	.5	53,100	.5
4400 HEALTH EDUCATION	79,105	.6	87,270	.8	94,320	.8
4500 REHABILITATION	328,643	2.6	274,140	2.5	273,040	2.4
II. DEVELOPMENT OF THE INFRASTRUCTURE	10,885,304	85.8	9,012,385	82.9	9,533,283	82.6
HEALTH SYSTEMS	10,482,894	82.6	8,756,335	80.5	9,312,258	80.7
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,565,980	20.2	2,867,640	26.4	3,117,370	27.0
5100 GENERAL PUBLIC HEALTH SYSTEMS	4,204,411	33.2	3,119,828	28.7	3,439,648	29.8
5200 MEDICAL CARE SYSTEMS	1,393,284	11.0	905,775	8.3	892,250	7.7
5300 PLANNING	765,226	6.0	734,747	6.8	707,305	6.1
5400 STATISTICS AND INFORMATION SYSTEMS	131,522	1.0	70,510	.6	75,060	.7
5500 MANAGEMENT SYSTEMS	1,422,471	11.2	1,057,835	9.7	1,080,625	9.4
PHYSICAL RESOURCES	332,535	2.6	182,095	1.7	142,745	1.2
7400 MAINTENANCE OF HEALTH CARE FACILITIES	332,535	2.6	182,095	1.7	142,745	1.2
7800 FINANCIAL RESOURCES	69,875	.6	73,955	.7	78,280	.7
GRAND TOTAL	12,696,231	100.0	10,862,475	100.0	11,543,813	100.0
PERCENT OF TOTAL BUDGET	18.0		17.3		18.0	

ANNEX 6 . . . continued

PROGRAM BUDGET
DETAIL BY AREA OF TECHNICAL COOPERATION

DEVELOPMENT OF HUMAN RESOURCES AND RESEARCH

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
II. DEVELOPMENT OF THE INFRASTRUCTURE	8,889,819	100.0	8,576,780	100.0	8,296,882	100.0
HEALTH SYSTEMS	199,701	2.3	127,965	1.4	157,840	1.8
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,000	*	4,000	*	3,060	*
5100 GENERAL PUBLIC HEALTH SYSTEMS	85,470	1.0	96,465	1.1	126,480	1.5
5200 MEDICAL CARE SYSTEMS	85,331	1.0	-	-	-	-
5400 STATISTICS AND INFORMATION SYSTEMS	26,900	.3	27,500	.3	28,300	.3
DEVELOPMENT OF HUMAN RESOURCES	4,987,921	55.9	4,916,890	57.4	4,326,070	52.1
6000 PROGRAM PLANNING AND GENERAL ACTIVITIES	2,056,123	23.0	2,005,420	23.4	1,677,780	20.3
6100 PUBLIC HEALTH	442,520	5.0	444,175	5.2	389,680	4.7
6200 MEDICINE	453,855	5.1	456,985	5.3	496,660	6.0
6300 NURSING	411,689	4.6	391,070	4.6	416,225	5.0
6400 ENVIRONMENTAL SCIENCES	251,335	2.8	253,295	3.0	284,860	3.4
6500 VETERINARY MEDICINE	471,310	5.3	453,730	5.3	401,695	4.8
6600 DENTISTRY	446,257	5.0	338,885	4.0	229,500	2.8
6700 BIOSTATISTICS	2,500	*	3,000	*	3,400	*
6900 OTHER	452,132	5.1	570,330	6.6	426,270	5.1
TECHNOLOGICAL RESOURCES	3,377,587	38.1	3,191,470	37.2	3,463,632	41.9
8000 PROGRAM PLANNING AND GENERAL ACTIVITIES	107,595	1.2	115,115	1.3	128,850	1.6
8100 TEXTBOOKS AND OTHER TEACHING MATERIALS	1,723,035	19.4	1,945,710	22.7	2,173,455	26.3
8300 MEDICAL TEXTBOOKS	188,000	2.1	235,000	2.7	292,000	3.5
8400 NURSING TEXTBOOKS	58,142	.7	-	-	-	-
8500 OTHER	991,862	11.2	649,470	7.6	665,660	8.0
8700 REGIONAL LIBRARIES	308,953	3.5	246,175	2.9	203,667	2.5
8900 OTHER TECHNOLOGICAL RESOURCES	324,610	3.7	340,455	4.0	349,340	4.2
RESEARCH COORDINATION						
GRAND TOTAL	8,889,819	100.0	8,576,780	100.0	8,296,882	100.0
PERCENT OF TOTAL BUDGET	12.6		13.7		13.0	

*LESS THAN .05 PERCENT

SUPPORTING SERVICES

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
II. DEVELOPMENT OF THE INFRASTRUCTURE	1,471,849	100.0	1,591,595	100.0	1,656,465	100.0
HEALTH SYSTEMS	1,471,849	100.0	1,591,595	100.0	1,656,465	100.0
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	24,500	1.7	20,000	1.3	22,500	1.4
5400 STATISTICS AND INFORMATION SYSTEMS	1,447,349	98.3	1,571,595	98.7	1,633,965	98.6
GRAND TOTAL	1,471,849	100.0	1,591,595	100.0	1,656,465	100.0
PERCENT OF TOTAL BUDGET	2.1		2.5		2.6	

ANNEX 6 . . . continued

PROGRAM BUDGET
DETAIL BY AREA OF TECHNICAL COOPERATION

ADMINISTRATION

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
II. DEVELOPMENT OF THE INFRASTRUCTURE	2,007,359	100.0	2,139,820	100.0	2,311,837	100.0
HEALTH SYSTEMS	758,304	37.8	820,870	38.3	885,112	38.3
5000 PROGRAM PLANNING AND GENERAL ACTIVITIES	76,014	3.9	83,790	3.9	90,077	3.9
5400 STATISTICS AND INFORMATION SYSTEMS	680,290	33.9	737,080	34.4	795,035	34.4
TECHNOLOGICAL RESOURCES	1,249,055	62.2	1,318,950	61.7	1,426,725	61.7
8500 REGIONAL LIBRARIES	151,415	7.5	160,395	7.5	169,755	7.3
8600 EDITORIAL SERVICES	1,097,640	54.7	1,158,555	54.2	1,256,970	54.4
GRAND TOTAL	2,007,359	100.0	2,139,820	100.0	2,311,837	100.0
PERCENT OF TOTAL BUDGET	2.9		3.4		3.6	

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
III. ADMINISTRATIVE DIRECTION	6,978,905	100.0	7,447,320	100.0	8,092,125	100.0
9100 EXECUTIVE AND TECHNICAL DIRECTION	643,875	9.2	755,435	10.1	875,895	10.8
9200 PROGRAM SERVICES	462,070	6.6	482,500	6.5	523,435	6.5
9300 ADMINISTRATIVE SERVICES	3,878,320	55.6	4,155,310	55.9	4,553,470	56.3
9400 GENERAL EXPENSES	1,993,840	28.6	2,044,075	27.4	2,139,325	26.4
GRAND TOTAL	6,978,905	100.0	7,447,320	100.0	8,092,125	100.0
PERCENT OF TOTAL BUDGET	9.9		11.9		12.7	

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
IV. GOVERNING BODIES	553,820	100.0	588,100	100.0	646,830	100.0
GRAND TOTAL	553,820	100.0	588,100	100.0	646,830	100.0
PERCENT OF TOTAL BUDGET	0.8		0.9		1.0	

PROGRAM CLASSIFICATION	1 9 7 7		1 9 7 8		1 9 7 9	
	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT	AMOUNT \$	PERCENT
V. INCREASE TO ASSETS	500,000	100.0	500,000	100.0	500,000	100.0
GRAND TOTAL	500,000	100.0	500,000	100.0	500,000	100.0
PERCENT OF TOTAL BUDGET	0.9		0.8		0.8	

SOURCE OF FUNDS		TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER	
		\$	MONTHS PROF.	LOCAL	CONS. MONTH	AMOUNT	MONTHS	AMOUNT					
1977													
PAHO	PR	10,215,980	1796	1632	153	7,490,290		838	655,260	413,990	213,315	223,390	760,740
	PG	4,401,662	213	72	315	1,891,745		1419	992,568	174,990	481,161	-	766,469
	PH	2,661,090	59	107	21	339,533		34	26,275	162,890	1,851,661	86,423	168,075
	PD	100,000	-	-	-	-		-	-	-	100,000	-	-
WHO	WR	5,003,940	726	396	172	3,040,685		957	755,890	239,605	305,495	76,000	358,815
	UNDP	1,723,887	236	48	55	1,155,625		170	179,818	-	315,772	-	39,027
TOTAL		24,106,559	3030	2255	716	13,917,378		3418	2,609,911	1,011,475	3,269,184	385,813	2,093,097
PCT. OF TOTAL		100.0				57.7		3.4	10.8	4.2	13.6	1.6	8.7
1978													
PAHO	PR	11,127,860	1804	1644	159	8,198,015		846	756,710	429,450	249,020	198,500	808,850
	PG	2,703,899	128	72	59	704,175		125	99,436	152,730	127,863	-	249,329
	PH	2,536,725	59	108	9	306,375		19	16,900	92,350	1,901,300	81,100	114,000
WHO	WR	5,384,935	744	420	143	3,433,260		911	825,235	255,280	245,710	56,000	360,240
	UNDP	1,581,487	175	48	59	1,035,060		153	149,059	38,460	304,358	-	37,500
TOTAL		21,873,906	2910	2292	429	13,676,885		2052	1,847,167	837,270	2,828,251	335,600	1,570,119
PCT. OF TOTAL		100.0				62.5		8.5	3.8	12.9	1.5	7.2	
1979													
PAHO	PR	12,195,515	1800	1644	174	8,881,145		1025	1,053,500	402,865	262,165	182,100	902,795
	PG	2,955,863	12	-	4	52,845		76	69,018	127,000	127,000	-	226,500
	PH	2,703,949	59	108	9	306,375		19	16,900	92,350	1,901,300	81,100	114,000
WHO	WR	5,767,210	780	420	126	3,778,465		905	942,100	241,965	200,355	48,250	329,375
	UNDP	1,053,445	120	48	34	742,160		77	86,250	28,000	143,135	-	34,500
TOTAL		22,233,582	2771	2220	346	13,816,542		2086	2,154,005	755,654	2,848,516	311,450	1,562,170
PCT. OF TOTAL		100.0				62.2		9.7	3.4	12.8	1.4	7.0	
<div> <div>PAHO-PR-REGULAR BUDGET</div> <div>PAHO-PR-COMMUNITY WATER SUPPLY</div> <div>PAHO-PR-INCAP - REGULAR BUDGET</div> <div>PAHO-PR-INCAP - GRANTS AND OTHER CONTRIBUTIONS</div> <div>PAHO-PR-GRANTS AND OTHER CONTRIBUTIONS</div> <div>PAHO-PR-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION</div> </div> <div> <div>PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND</div> <div>PAHO-PD-PJ-GRANTS RELATED TO CAREC</div> <div>PAHO-PD-REGULAR BUDGET</div> <div>PAHO-PD-UNDP-UNITED NATIONS DEVELOPMENT PROGRAM</div> <div>PAHO-PD-UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES</div> <div>PAHO-PD-GRANTS AND OTHER FUNDS</div> </div>													

SOURCE OF FUNDS	TOTAL AMOUNT	PERSONNEL			DUTY TRAVEL AMOUNT	FELLOWSHIPS		SEMINARS AND COURSES	SUPPLIES AND EQUIPMENT	GRANTS	OTHER
	\$	MONTHS PROF.	LOCAL	CONS. MONTH	\$	MONTHS	\$	\$	\$	\$	\$
1977											
PAHO---PR	5,400,080	696	1692	-	3,802,070	-	-	-	141,545	-	1,404,815
WHO---WR	1,578,825	168	324	-	963,270	-	-	-	98,360	-	450,595
TOTAL	6,978,905	864	2016	-	4,765,340	-	-	-	239,905	-	1,895,710
PCT. OF TOTAL	100.0				68.3				3.4		27.2
1978											
PAHO---PR	5,693,785	714	1716	-	4,128,320	-	-	-	147,865	-	1,359,360
WHO---WR	1,753,535	168	324	-	1,035,935	-	-	-	102,755	-	583,535
TOTAL	7,447,320	882	2040	-	5,167,955	-	-	-	250,620	-	1,942,895
PCT. OF TOTAL	100.0				69.4				3.4		26.1
1979											
PAHO---PR	6,265,720	696	1728	-	4,565,410	-	-	-	164,010	-	1,474,780
WHO---WR	1,826,405	168	324	-	1,139,455	-	-	-	99,140	-	558,905
TOTAL	8,092,125	864	2052	-	5,704,865	-	-	-	263,150	-	2,033,685
PCT. OF TOTAL	100.0				70.5				3.3		25.1
<hr/>											
PAHO-PR-REGULAR BUDGET PW-COMMUNITY WATER SUPPLY PA-INCAP - REGULAR BUDGET PW-INCAP - GRANTS AND OTHER CONTRIBUTIONS PG-GRANTS AND OTHER CONTRIBUTIONS PH-PAN AMERICAN HEALTH AND EDUCATION FOUNDATION						PAHO-PD-NATURAL DISASTER RELIEF VOLUNTARY FUND PJ-GRANTS RELATED TO CAREC WHO-WR-REGULAR BUDGET UNDP--UNITED NATIONS DEVELOPMENT PROGRAM UNFPA-UNITED NATIONS FUND FOR POPULATION ACTIVITIES WO-GRANTS AND OTHER FUNDS					

ANNEX 8
BUILDING FUND

	<u>1977</u>	<u>1978</u>	<u>1979</u>
INCAP Reconstruction	372,697	-	-
CEPIS Building	51,816	-	-

ANNEX 9

INFORMATIONAL SCHEDULE SHOWING ACTUAL PERCENTAGE IN RESPECT TO
CONTRIBUTIONS FOR 1978 UNDER THE PAHO REGULAR BUDGET PROPOSAL

<u>Country</u>	<u>OAS Scale</u>	<u>Gross Assessment^{a/}</u>	<u>Actual Percentages</u>
Argentina	7.73	2,580,803	7.174
Barbados	0.07	23,371	0.065
Bolivia	0.19	63,435	0.176
Brazil	7.31	2,440,578	6.785
Chile	1.33	444,045	1.234
Colombia	1.52	507,480	1.411
Costa Rica	0.19	63,435	0.176
Cuba	1.04	347,223	0.965
Dominican Republic	0.19	63,435	0.176
Ecuador	0.19	63,435	0.176
El Salvador	0.19	63,435	0.176
Guatemala	0.28	93,483	0.260
Haiti	0.19	63,435	0.176
Honduras	0.19	63,435	0.176
Jamaica	0.19	63,435	0.176
Mexico	8.17	2,727,705	7.583
Nicaragua	0.19	63,435	0.176
Panama	0.19	63,435	0.176
Paraguay	0.19	63,435	0.176
Peru	0.66	220,353	0.612
Trinidad and Tobago	0.19	63,435	0.176
United States of America	66.00	22,035,314	61.248
Uruguay	0.57	190,305	0.529
Venezuela	3.04	1,014,960	2.821
Subtotal	100.00 ^{b/}	33,386,840	92.799
<u>Equivalent Percentages</u>			
<u>Other Member Governments</u>			
Bahamas	0.06	20,032	0.056
Canada	6.94	2,317,047	6.441
Guyana	0.19	63,435	0.176
Surinam	0.12	40,064	0.111
<u>Participating Governments</u>			
France	0.19	63,435	0.176
Kingdom of the Netherlands	0.07	23,371	0.065
United Kingdom	0.19	63,435	0.176
Subtotal	7.76	2,590,819	7.201
Total Assessments - All Countries	107.76	35,977,659	100.000
	=====	=====	=====

^{a/} The net assessment for each Government is obtained by deducting the credit from the Tax Equalization Fund and adding any adjustment for taxes imposed on the emoluments of PAHO staff.

^{b/} The OAS percentages have been adjusted to 100% for PAHO membership since the OAS membership includes Grenada at 0.03%.