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REPORT ON THE MEDIUM-TERM PROGRAM FOR THE DEVELOPMENT OF HUMAN RESOURCES

Resolution XXXII, approved at the XXV Meeting of the Directing Council (1977), recommended application of the Medium-Term Program for the Development of Human Resources and requested the presentation of periodic progress reports on it.

This document covers the first 30 months of implementation of the Program, and analyzes the priorities established, the program carried out (as to its content and the resources employed) and the current prospects for its continuation.

The Council can take cognizance of the progress of the process and recommend future activities in the context of the strategies for attaining the goal of "Health for All by the Year 2000."

1. Introduction

The XXV Meeting of the Directing Council (1977) reviewed the Medium-Term Program (MTP) in the program area of human resources development for the period 1978-1983, and approved Resolution XXXII

(Annex I) recommending that it be used as a basic guide for country programming, with due regard to the specific needs and characteristics of each country.

The adoption by WHO of human resources as its pilot program for the introduction of medium-term programming led to its presentation to the Directing Council and to the periodic evaluation of its progress by the Council as a natural continuation of a process going forward on a trial basis.

Accordingly, the present progress report will focus more on analyzing the MTP as a guide to programming and implementation of the program than on evaluating the gains.

1.1 Content

The object of analysis will be the structure of the Medium-Term Program and the three program areas and 11 specific fields of activity into which it is divided, which may be simply enumerated as follows (and which will later be used in the text and the tables):

AREA I - Human Resources Coordination, Planning, and Utilization

- A. Coordination between education and service institutions
- B. Human resource planning
- C. Training in administration
- D. Continuing education
- E. Control of professional migration

AREA II - Human Resources Development

- F. Institutional development
- G. Program development
- H. Advanced training and supervision

AREA III - Technological Resources

- I. Educational and technological development
- J. Instructional materials
- K. Health information and documentation

The complete MTP as presented to the Directing Council in 1977¹ may be found in Annex II; it describes in greater detail the emphasis, priorities and specific actions involved in each of these fields of activity.

¹Document CD25/8 of 31 August 1977

1.2 The Introduction of the MTP in the Region

The Medium-Term Program, like the Sixth General Program of Work of WHO, covers a six-year period, from 1978 to 1983, and for the Region of the Americas is also linked to the Ten-Year Health Plan for the Americas (1971-1980).

As stated in the document itself, it was not possible to involve all echelons of the staff in its formulation following the guidelines proposed by WHO because of the impossibility at that opening stage of training them in the use of the Program's methodology. That was accomplished at the Central Office and provided only an indication of the main lines of work, which would subsequently have to be adjusted to local problems.

The main purposes of this instrument were:

- a) To permit early dialogue between the various structural levels of the Organization and improved coordination of activities;
- b) To serve as a channel for the local implementation of hemispheric policies in compliance with the resolutions of the Governing Bodies; and
- c) To provide general guidance for the Organization in its undertaking of commitments in the development of the new programming scheme in the discussions prior to the country budget.

1.3 Implementation

Implementation of the MTP began with the sending of the resolution approved by the Directing Council, together with the complete program, to all the countries, with instructions to the PAHO/WHO Representatives that they take the areas and goals of activity as indicative of the areas in which the Organization could offer cooperation, for consideration in discussions of joint programming with the countries. In addition, the details provided in the descriptions of specific actions could provide more objective guidance in formulating the local plan of action.

As a second step, a field trial was held in Peru, which included an analysis of the programs of the other countries in Area IV to determine the effectiveness of the instrument and the difficulties that might be encountered in its use, for the guidance of country-level programming. Thereafter, a questionnaire was sent to all the PAHO/WHO

Representatives to collect information on the countries' base-line situations in the different fields of activity, their interest in those fields, and the priority they assign to each of them.

Also, to standardize the various programming levels, the MTP was incorporated, in its entirety, into the regional profile of human resource programming, which was also sent to the countries as a working document.

The specific cooperation program was then incorporated into AMPES, the instrument adopted by the Region of the Americas for the programming and evaluation of its technical cooperation activities.

1.4 Priorities

The previously-mentioned questionnaire succeeded in eliciting the interest of the countries in each field of MTP activity and the priority they attached to it, as illustrated in Table 1, which also represents the goals as percentages of the total participating countries indicated in the initial document.

Table 1

GOALS INTERESTS PRIORITIES, BY AREA OF ACTIVITY
(Areas indicated in 1.1)

Area of Activity	A	B	C	D	E	F	G	H	I	J	K	r ²
MTP Goals*	75	60	70	50	30	60	60	50	50	75	60	
Countries Interested No.	17	21	24	20	10	23	22	22	23	18	22	
%	63	77	88	74	37	85	81	81	85	66	81	
Priority Assigned Degree by Countries** %	37	51	51	49	15	65	52	61	48	49	53	
	7	9.6	9.6	9.2	2.8	12.2	9.8	11.6	9	9.2	10	0.79***

* As percentage of the total number of countries in the Region

** Average value of the priority attached by 25 countries

*** Correlation between the number of countries interested and the degree of priority accorded

Of course, these data must be viewed with a reserve commensurate with the subjectivity with which the questionnaires must have been answered. However, the repetition of findings and evidence of associations or disparities among them may serve to support some conclusions.

In this case there is a clear correlation between the interest expressed by the countries in participating in the individual activities and the priority assigned by them to the immediate implementation of each of them ($r^2 = .79$). The result is quite different when this datum is correlated with the number of countries that, according to the projection of the goal given in the MTP, should be participating in the activity ($r^2 = .24$), which indicates that those goals were unrealistic, as they were in fact already assumed to be when the Directing Council recommended that the document be taken as a guide to programming and not as "the Program" to be implemented in its initial form. Since then the statements of priorities have been taken as the best parameter for use in monitoring the Program.

2. Description and Summary Analysis of the Program Carried Out

The basic object of analysis here will be the work done in the time since the MTP was prepared, which is 30 months (from the beginning of 1978 to mid-1980). In what follows, the program content of the cooperation provided by the Organization will be analyzed.

2.1 Cooperation Provided

The cooperation provided can be measured by the resources provided, mainly the two elements of the cooperation which exert the greatest impact, which are the "experts"--including in-house staff and short-term consultants--and direct training through the fellowships program.

These two elements are used and distributed differently in each area of activity, and there are peculiar situations in which a given element is not used, as in the case of the Textbook Program (activity J), in which consultants are only employed on the selection committees at the central level. Another difference is that fellowships are available only under country programs, and not under those of regional scope.

In view of the importance of these two elements, which account for the most substantive part of the Organization's technical cooperation, it was endeavored to find a common denominator in terms of which overall figures would be obtained for each area of activity so as to embody in the same value the cost of "consultant days" and "fellowship-months."

Table 2 summarizes these data for the Region as a whole. The data is broken down in detail for each country in Annex III.

Table 2

INPUT PROVIDED
(1978-1980)

Areas of Activity		A	B	C	D	E	F	G	H	I	J	K	Total
CONSULT- ANTS*	Countries	259	630	264	1,529	-	4,248	3,252	1,007	1,003	-	173	12,365
	Regional	395	648	746	269	-	301	1,317	1,749	1,967	1,075	1,763	10,230
	Total	654	1,278	1,010	1,798	-	4,549	4,569	2,756	2,970	1,075	1,936	22,595
	%	3.0	5.6	4.5	8.0	-	20.0	20.2	12.2	13.2	4.8	8.5	100
FELLOW- SHIPS**	Months	48	11.75	377.75	594.75	-	137.75	1,097	553.5	113.5	-	91.5	3,025.5
	%	1.6	0.4	12.5	19.7	-	4.5	36.3	18.3	3.7	-	3.0	100
FUNDS***	Countries	79	87	409	778	-	647	1,487	1,174	233	-	112	5,006
	Regional	217	242	184	101	-	145	209	485	439	374	605	3,001
	Total	296	329	593	879	-	792	1,696	1,659	672	374	717	8,007
	%	3.7	4.1	7.4	11.0	-	10.0	21.0	20.8	8.4	4.6	9.0	100

(*) In consultant-days

(**) In fellowship-months

(***) In thousands of US dollars (US\$1,000)

The funds shown in Table 2 refer only to the cost of the advisory services and fellowships utilized, and not to the total amount budgeted.

These data reveal the heaviest concentration of actions in two areas of activity--G and H--which correspond to program development, including support to teaching programs with emphasis on community-oriented training, and to advanced training and supervisor training. A lighter concentration of actions is seen in five areas of activity--D, F, K, I and C--which relate, respectively, to continuing education, institutional development, documentation and information, educational technology, and training of administrators. These areas account for sizable portions of the programming implemented and for 45.8 per cent of the total funding provided.

The proportions of the funds allocated to the regional and country levels (37.5 and 62.5 per cent, respectively,) do not correspond to those of the allocations of the "field" and the central level. This is so firstly because the regional level includes subregional activities relating to the Area Offices and the Caribbean, and, secondly, because these amounts do not include other allocations for grants, equipment and materials, or participation in seminars and working groups, which are activities more usually associated with field programs. It is considered that a more comprehensive analysis of the situation would yield a ratio of resources provided at the central level to those at the country level of 1:5.

It is important to point out that the distribution of activities carried out during the period does not correlate highly ($r^2 = .44$) with the initially stated priorities, which may be due to changes during those two and a half years or to the better availability of resources, particularly extrabudgetary funds, in specific areas, or to both reasons. It also has to be considered that in 1977, after these priorities had been established, other important events took place, such as the Alma-Ata Conference, and clearer lines of action were laid down in the context of the goal of health for all by the year 2000, which has been influencing the countries considerably in the redefinition of their priorities and action strategies.

On this point, the areas of activity in which resources have been found to be most heavily concentrated may be regarded as closely connected with the greater emphasis being placed on programs of primary care and for the development of appropriate technology.

Finally, in our analysis of cooperation provided by areas of activity, we have endeavored to collect information from the field

personnel directly responsible for the execution of the projects, which information is illuminating, despite its subjective nature. The distribution of the degrees of support to the several components does not match that of the more objective data of consultant and fellowship utilization, although it may complement it inasmuch as many actions taken directly by the international or national staff member sometimes contribute to the attainment of objectives in a program area without showing up in the utilization of a specific resource. Table 3 shows the degrees of support reported by the PAHO/WHO field staff and the percentage distribution of that support among the areas of activity.

Table 3

DEGREE OF SUPPORT BY AREA OF ACTIVITY

Area of Activity	A	B	C	D	E	F	G	H	I	J	K
Degree of Support	48	38	44	44	10	40	41	49	56	46	45
Percentage Distribution	10.5	8.2	9.6	9.6	2.0	8.6	8.9	10.7	12.1	10.0	9.8

This table displays a greater discrepancy than the previous ones because it reflects the local impression resulting from broader action not confined to the elements provided by international cooperation. Thus, the national effort joined to the work done by the Organization can give rise to an important divergence in the degree of support to each area of activity. Moreover, in a few cases (as in "I"), resources of the countries themselves have been used and fellowships financed under ICDC arrangements, which are not administered directly by the Organization.

2.2 Program Content

Though no qualitative evaluation is intended, it is regarded as necessary to describe in this progress report the most important specific content of each MTP program area.

AREA I: Human Resource Coordination, Planning, and Utilization

- A. Promotion of a policy of integrating teaching with care through several seminars and structural support operations at the central level of the Governments, in departmental units, and in service and social security institutions and universities.

In several countries "teaching-care coordination" committees, councils and working groups were established to advise in decisions to be taken jointly by the ministry of health and other service agencies in regard to the training and employment of health professionals.

Activities under the Latin American Program of Educational Development for Health (PLADES) project for building a network of units for research and development in education and health were concluded during the period. Ten such units were set up in seven countries of the Region (Bolivia, Brazil, Costa Rica, Dominican Republic, Honduras, Mexico, and Venezuela).

- B. Consolidation and strengthening of the human resource offices (or the equivalent thereof) in the ministries of health of 15 countries of the Region (Argentina, Bolivia, Brazil, Chile, Colombia, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, Peru, and Venezuela). Two international courses in human resource planning were conducted in Colombia, and seminars on the subject at the national level were held in the countries of the Andean area and the English-speaking Caribbean.

Specific advisory services were provided in this field in Brazil, the Andean area countries, Trinidad and Tobago, and Venezuela.

- C. Formulation of the project and obtaining financial support from the Kellogg Foundation for a regional administrator training program. Direct support to programs in progress (44 in Latin America), and advisory services for the conduct of five advanced training programs in Brazil, Colombia, Costa Rica, and Mexico, three of which are already in progress. Coordination of the design of teaching materials and literature in this field.
- D. Integrated programs of continuing education for all the health professions were launched with financing from the Canadian International Development Agency (CIDA) in seven countries of the Region (Bolivia, Colombia, Cuba, Dominican Republic, Ecuador, Guatemala, and Honduras).

In support of these programs a reference center is being set up in Costa Rica to produce instructional materials and distribute information.

In addition, cooperation was provided in the conduct of continuing education activities in specific fields and disciplines in almost all the countries of the Region.

- E. No specific actions were carried out in the area of the migration of professional personnel.

AREA II: Human Resources Development

- F. The Organization served as executing agency in the management of institutional development projects financed by the Inter-American Development Bank (IDB) and designed for the establishment and renovation of the health sector in universities in several countries (Dominican Republic, Honduras, and Nicaragua). Direct support to the development of educational institutions in Bolivia, Colombia, Mexico, and Venezuela.

Two regional meetings were held to determine minimum requirements for training in health sciences and in medicine specifically. This resulted in the conclusion of an agreement with the Pan American Federation of Associations of Medical Schools (FEPAFEM) for promoting at the national level the determination of minimum standards for the functioning of their teaching institutions. In preparation for this activity, a scheme for institutional evaluation was formulated and is being implemented in several countries.

- G. Direct collaboration in training programs in almost all the countries of the Region, with emphasis on those designed for intermediate-level and auxiliary personnel. Review of the training programs for intermediate-level technicians (Central America, Cuba, Mexico, and Venezuela). Establishment of the Community Health Training Program for Central America and Panama (PASCCAP), with headquarters in Costa Rica and subcenters in all the other countries of the subregion, and financed by the United Nations Development Program (UNDP) and PAHO/WHO. The Program is starting applied research in the context of extension of the coverage of health services by means of primary care, and is promoting training activities in the preparation of instructional materials for the same purpose. In particular, a plan for the training of health administrators in several areas of work is being drawn up under PASCCAP.

The programs for the training of paramedical personnel in the Caribbean and for the training of personnel in Brazil continue in operation; an extensive evaluation has been made of the former, and the latter is going forward with financing from the Government itself under a trust arrangement.

- H. Introduction of the program for supervisor training in peripheral health units in 10 countries of the Region (Bolivia, Brazil, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, Panama and Peru). This includes analysis of the local situation and the formulation of basic schemes for supervision itself, the conduct of promotional seminars and of training courses for instructors, and the design of learning materials for the same purpose. Support to graduate programs of public health schools and in specific fields at universities and service institutions.

A start on decentralizing the management of the fellowship program with an experiment in the Caribbean. Prior to this, the program management manual was rewritten, a directory of training programs was compiled, and a new evaluation system was introduced.

AREA III: Technological Resources

- I. Continuation of the teacher-training program in courses and through the dissemination of self-teaching modules designed by the Latin American Center for Educational Technology in Health (CLATES) in Rio de Janeiro, Brazil. The orientation of educational development measures toward primary care programs as the first priority.

Technical advisory services to several countries in the Region, and the strengthening of education offices in the institutions supported by the institutional development program. Cooperation with activities in other technical areas of the Organization, including advanced training in educational techniques for staff members directly performing teaching functions. Support to the preparation of instructional materials for supervisor training and the Textbook Program and, in the latter program in particular, the preparation of manuals for the Expanded Program on Immunization and of a Basic Course on Epidemiology for in-service personnel.

Reformulation of the nursing educational technology project for extending the external financing provided by the Kellogg Foundation.

The design of a scheme for the evaluation of teaching care integration programs.

- J. Meetings to promote the Textbook Program in its second expansion stage. Launching of its implementation, spanning all the health occupations by establishing direct contacts with national authorities in areas that might be more directly involved in the preparation of instructional materials adapted to local problems.

Selection of new textbooks for health administration, sanitary engineering, obstetrics and obstetrical nursing dentistry, veterinary medicine, and nutrition.

Conduct of a country-level survey to identify institutions and materials being used for the training of technical and auxiliary personnel.

Revisions of manuals in the fields of maternal and child health, basic sanitation, and community care.

Continuation of the medical and nursing textbook and medical instrument programs.

- K. A comprehensive review of the functioning of the Regional Library of Medicine and the Health Sciences (RLM) and an analysis of the possibilities for expanding the Latin American Biomedical and Health Information Network. With the support of the Rockefeller Foundation, four regional meetings were held to redefine the operational basis of the Network, a survey of the other libraries in Latin America was conducted, and selective countries were visited to update the information on stocks of materials and the potential of the existing communications systems for consolidation of the information exchange process. A beginning was made on indexing the Latin American literature in RLM and on the periodical publication of the Index Medicus de America Latina. New series of publications were prepared on priority areas of the Organization's program, such as primary care, traditional medicine, maternal and child care, and Chagas'disease, among others.

Lastly, a long-term scheme was launched for expanding the holdings of RLM and for possibly enlarging the capacity of MEDLARS in its present configuration. Also an expansion program for this program area has been drawn up which provides for direct support to national documentation and information networks.

3. Prospects

The changes in the initial program during the period reviewed were made to adjust the regional plan to circumstances encountered in individual countries, and as such they clearly constitute compliance with the Directing Council's resolution recommending that the MTP "be used as a basic guide for country programming with due regard to the specific needs and characteristics of each country and adjustments over the duration of the Program."

In view of this and because of the flexibility, the adjustments could be made without altering the structure of the Program. In the present analysis an effort has been made to study the configuration that the Program is acquiring on the basis of the activities scheduled for the more immediate future and of the longer-term strategies charted for attaining the goal of health for all by the year 2000.

Again, the indicators used for these two projections are different and, therefore, of doubtful comparability. AMPES reflects the number of specific actions planned in all the countries in each field of MTP activity. The strategies are based on the number of times the countries have mentioned specific strategies for each area of activity under the Program.

It is interesting that these data, which were derived from the percentage distributions among the various areas and fields of activity, are closely proportional, which may indicate mutual consistency between the two projections, and only confirms the predominant interest of the countries of the Region in priority aspects of the programming.

Table 4 illustrates this situation and attempts to consolidate all the available information into three "stages of progression" of the Medium-Term Program, using for the initial proposal indicators of the priority assigned by the countries in the original program and budget; for the current stage, in relation to what has been carried out, the subjective indication of the degree of support and actual expenditure; and for the projections, the aforementioned data from AMPES and the strategies for the year 2000.

It can be seen in this table that the three first series (PRIORITY/ORIGINAL BUDGET/SUPPORT) correlate very poorly among each other ($r^2 = + 0.38$) and with the other series. This is, on the one hand, because they relate to a proposal for the Region as a whole, as in the case of the "original budget" given in the MTP, and, on the other hand, because they represent initial adjustment stages, as in the case of the "priority" indicators.

Table 4

STAGES OF PROGRESSION - PAST, PRESENT, AND FUTURE

Area of Activity		A	B	C	D	E	F	G	H	I	J	K	Total
PROPOSED*	Priority	37	51	51	49	15	65	52	61	48	49	53	
	%	7	9.6	9.6	9.2	2.8	12.2	9.8	11.6	9	9.2	10	100
	Original Budget ¹	50	260	435	608	55	1,290	527	1,895	1,450	595	1,580	8,745
	%	0.5	3.0	5.0	7.0	0.5	15.0	6.0	22.0	16.0	7.0	18.0	100
CARRIED OUT**	Support	48	38	44	44	10	40	41	49	56	46	45	
	%	10.5	8.2	9.6	9.6	2.0	8.6	8.9	10.7	12.1	10.0	9.8	100
	Actual Expenditure	296	329	593	879	-	792	1,696	1,659	672	374	717	8,007
	%	3.7	4.1	7.4	11.0	-	10.0	21.0	20.8	8.4	4.6	9.0	100
PROJECTED***	AMPES	27	56	36	47	1	55	93	111	81	34	37	
	%	4.7	9.7	6.2	8.1	0.2	9.6	16.0	19.2	14.0	5.9	6.4	100
	Strategies Health 2000	17	19	11	11	-	18	34	23	21	16	14	
	%	9.2	10.3	6.0	6.0	-	9.8	18.5	12.5	11.4	8.7	7.6	100

¹In thousands of United States dollars

* The "proposed" figures are based on data for 1977, including the budget given in the MTP for the period under study and the priorities stated by the countries when surveyed at that time.

** The "carried out" section is based on field staff reports on the program carried out and actual expenditures, together with the amounts for consultancies and fellowships over the 30 months considered.

*** The analysis of the "projected" implementation is based on the most recent AMPES, which embraces the activities scheduled for 1980 and the strategies established by 22 countries in the Region for attaining the goal of health for all by the year 2000 (July 1980).

However, the other series (ACTUAL EXPENDITURE/AMPES/STRATEGIES) correlate more highly among themselves ($r^2 = + .70$), and are based on the more concrete data of "actual expenditure", which keeps the distribution of the concentration of activities by areas more constant. This suggests a degree of consolidation or better definition of goals for continuation of the Program, and has longer-run implications as well, being reflected in the strategies proposed by the countries for attaining the global goal of health for all by the year 2000.

The distribution of these strategies among the macrostructural elements of the MTP reflects, on analysis of their specific content, a clearer orientation of the program to the Organization's overall priorities. Thus, it can be seen that areas A and B, which account for about 20 per cent of the total programming, are substantially enlarged from the 3.5 per cent accorded to them in the initial MTP budgeting. These areas, the purpose of which is the development of unified human resource and health service programming systems and joint programming for the two sectors, constitute in practice a single area of activity, which in a consolidated MTP can be expressed as a single component. To these areas must be added a new component that was mentioned in the strategies of the 16 countries in the Region: the promotion of an improved geographical distribution of health personnel in keeping with coverage extension plans.

Another set of priorities is also identified in areas G, H and I, which account for 42 per cent of the total effort, and consist in personnel training with emphasis on the levels of the intermediate technician, the auxiliary and the community itself; the development of supervisory systems; and refinement of the educational technology applicable to the attainment of these objectives.

The other areas of activity, which have lower percentages, can either be absorbed into the previously mentioned groups, or remain as complementary activities. Thus, areas C and D--training in health administration and planning, and continuing education, respectively--can be joined with the area of development of integrated education and health systems in order to strengthen the mechanisms for improving the utilization of health personnel. Area J is essentially the textbook and other teaching materials program, which was recently expanded by a new IDB loan to embrace all occupations and levels in the health sciences, and represents a supporting resource to complement the personnel training programs. The area of biomedical and health information and documentation is presented as a complementary activity in the context of human resource development, but its importance will increase significantly with the addition of the research and information systems components, particularly in view of the existing trend toward the development of information and documentation centers in health ministries themselves.

4. Conclusions

Analysis of the first phase of introduction of the Medium-Term Program in the Region demonstrates the advantage of the method as an exercise in the rationalization of programming when applied with broad flexibility as a guide to the formulation of plans for country-level cooperation.

In the specific case of the Region of the Americas, this exercise may represent a duplication of the use of AMPES as a country-level programming process. However, perhaps because the two processes were introduced at practically the same time, they would seem to have operated synergistically, the MTP providing better uniformity in the program areas and AMPES providing the adjustment of activities on the national level and their updating on a continuing basis.

Thus, the level of detail of the MTP, which could be seen as a halfway house between the General Program of Work of WHO (six years) and AMPES, with its breakdown of specific activities under each biennial program and budget, could be regarded as unneeded.

On the other hand, the experience acquired in monitoring the MTP and its continuation to 1983 will make an important contribution to the drawing up of the Seventh General Program of Work and of the regional action plans for development of the strategies of health for all by the year 2000.

Annexes



DIRECTING COUNCIL

PAN AMERICAN
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XXV Meeting

REGIONAL COMMITTEE

WORLD
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XXIX Meeting CD27/29 (Eng.)
ANNEX I

RESOLUTION XXXII

**Medium-Term Program for the Development of
Human Resources**

The Directing Council,

Considering that Resolution WHA29.72 approved by the Twenty-ninth World Health Assembly (May 1976) laid the foundations for drawing up the Medium-Term Program for the Development of Human Resources, and specified that it should be discussed by the Regional Committees in 1977;

Mindful of the policies approved in this field, both in the Ten-Year Health Plan for the Americas and in the contributions by the Region to the Sixth General Program of Work of WHO; and

Having reviewed Document CD25/8, specifying the goals and types of activity proposed in the Region of the Americas,

Resolves:

1. To take note of the Medium-Term Program for the Development of Human Resources in the Region of the Americas for the period 1978-1983 (Document CD25/8).

2. To recommend that the Program be used as a basic guide for country programming in this field in particular, with due regard to the specific needs and characteristics of each country and adjustments over the duration of the Program.

3. To request the Director to report periodically to the Governing Bodies on the progress of the Program.

*(Approved at the eleventh plenary session,
6 October 1977)*

A M R O
MEDIUM TERM PROGRAMME
OF
H U M A N R E S O U R C E S
1978-1983

PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION
JUNE 1977

(Third version)

AMRO-MEDIUM TERM PROGRAM FOR HUMAN RESOURCES DEVELOPMENT

1978 - 1983

A. INTRODUCTION

This document is a preliminary draft of the regional contribution to the Medium-Term Program (MTP) in the area of Human Resources for the period of 1978 to 1983. Its formulation, following the guidelines proposed by Headquarters could not involve in this first stage the participation of all-echelon staff because of the impossibility of training them in the handling of its methodology.* This first stage was in fact performed at the regional central office level and is only an indication of the main lines of work to be subsequently adjusted to local problems for effective country level implementation. The references to location and timing of activities are tentative only, as major changes are expected once the staff responsible for local action obtain the country authority's agreement for specific activities. For the same reason, budgetary estimates will have to remain flexible. Thus, the whole document should be interpreted broadly as a scheme to guide the final formulation of our biennial budget, to which necessary adjustments and country-by-country program needs should be incorporated when appropriate.

B. GENERAL CONSIDERATION

Having established the above premise, below are a few general considerations that influenced the formulation of the MTP program:

- (1) Technical cooperation. The strategic basis for the development of the program lay on the foundation of technical cooperation. This implies that national groups will play an important role in the coordination and execution of activities, and that the Organization's staff will work jointly with them in pursuing the targets accepted and incorporated by the country's policy.
- (2) National policies and plans, health services, educational institutions, training programs, community-health actions, development and utilization of appropriate technology constitute the framework of the activities described and will not be confined to isolated professions. Moreover, with the exception of a few references to environmental health, and dental and nursing personnel, the general trend of the program is definitely towards an interdisciplinary or multidisciplinary action.
- (3) As a consequence of the above, each activity should be seen as a whole and should be broken down for each level of involvement and each category of personnel related to the health structure and system of each country.
- (4) Although the description of activities in a given period of time suggests a starting point and a final one, their sequence should be cyclic according to countries' individual stages of development, and in some cases, according to developmental stages in areas within the same country. In the latter instance, the finer details will have to be established in consultation with the countries during the different developmental stages of MTP.
- (5) The analysis of the existing situation in priority areas indicates that to meet the goals for manpower development, it is necessary to adopt the following objectives as a prerequisite for the implementation of the present program:
 - 5.1 Increase of the understanding, at country level, of the importance of developing coordination among educational and service institutions; of planning criteria, methodology, and educational research; and of developing scientific and technological information and instructional materials.
 - 5.2 Investigating the possibility, in the countries and with national groups, of carrying out these activities (including local production of appropriate technology).
 - 5.3 Securing permanent on-going financing at country level.

*PWC/1/4 WHO, September, 1976

5.4 Analyzing the possibility of cooperation among national groups and among countries in order to achieve a greater multiplying effect.

5.5 Developing evaluation systems for continuing appraisal or determination at the end of the trial period, of the impact these programs have had on the general health conditions in the countries of the Region. This includes development of self-evaluation schemes by countries and national groups.

The outcome of the whole program will reflect countries' capability to analyze their own needs; execute projects; create and/or adapt appropriate technology; finance programs; apply self-evaluation and, lastly, will uncover the possibilities for vertical and horizontal cooperation.

C. ELABORATION OF THE MEDIUM-TERM PROGRAM

Based on the guidelines prepared by HQ, the regional preparation of MTP was instigated using an innovative approach through an interdivisional team, which in AMR, constitutes the HPS (Headquarters Program Subcommittee) of HR (Human Resources). This approach is consistent with the idea that the role of an international health organization should not be limited to providing education and training of personnel but that it should be extended to include support leading ultimately to the fostering of health activities.

Bearing this concept in mind, the targets to be defined in the three sub-areas agreed upon in Shiraz, Iran (Planning, Development, and Educational Support), must necessarily be considered in the context of the main priority areas established by the Organization's Governing Bodies. The Ten-Year Health Plan for the Americas clearly stated as focal point the "extension of coverage of health services to underserved populations" and established four specific priorities in (a) communicable diseases; (b) maternal and child health; (c) nutrition; and (d) environmental health. This orientation adopted by our HPS and seconded by interdivisional objectives from the Divisions of Health Services, Family Health, Disease Control, Environmental Health, and Supporting Services, leads to a broad definition of the aims of the program, in relation of each one of these priority areas:

- (1) TO PROMOTE THE DEVELOPMENT OF ADMINISTRATIVE AND TECHNICAL PERSONNEL FOR THE DIFFERENT LEVELS OF HEALTH CARE WITHIN A REGIONALIZED HEALTH SYSTEM.
 - (1.1) TO ENCOURAGE THE ADOPTION OF APPROPRIATE TECHNOLOGY WITHIN INFORMAL SUBSYSTEMS IN THOSE HEALTH ACTIVITIES WHICH ARE CARRIED BY THESE SUBSYSTEMS -- THIS OBJECTIVE WILL BE IMPLEMENTED IN ACCORDANCE WITH THE ROLE EACH COUNTRY HAS ASSIGNED TO THESE RESOURCES -- AND THE PARTICIPATION OF THE COMMUNITY THROUGH HEALTH EDUCATION AND THE DEVELOPMENT OF MEDICAL SKILLS.
- (2) TO STIMULATE THE QUANTITATIVE AND QUALITATIVE DEVELOPMENT OF HEALTH PERSONNEL AT ALL LEVELS AND CATEGORIES TO MEET HEALTH CARE NEEDS AND THE PROBLEMS OF PROTEIN-CALORIE MALNUTRITION IN THE MOTHER AND CHILD, SPECIALLY IN RURAL AREAS AND THE OUTSKIRTS OF URBAN CONGLOMERATES. EMPHASIS ON TRAINING WILL BE PLACED ON PROMOTIONAL PREVENTIVE ASPECTS, EARLY IDENTIFICATION OF HEALTH RISKS, REFERRAL, AND SPECIALIZED CARE.
- (3) TO ENCOURAGE THE DEVELOPMENT OF PERSONNEL REQUIRED FOR THE CONTROL OF PREVAILING COMMUNICABLE DISEASES; BASIC AND REFERRAL LABORATORIES; DATA COLLECTION, AND EPIDEMIOLOGICAL SURVEILLANCE.
- (4) TO ESTABLISH PROGRAMS FOR THE TRAINING OF ENVIRONMENTAL HEALTH PERSONNEL WITH EMPHASIS ON THE MANAGEMENT OF HUMAN ECOLOGY AND HEALTH PROBLEMS, OCCUPATIONAL HAZARDS, DEVELOPMENT AND IMPLEMENTATION OF SUITABLE ENVIRONMENTAL SANITATION TECHNOLOGIES. THESE PROGRAMS ARE BASICALLY INTENDED FOR RURAL AND MARGINAL CITY AREAS.

These objectives were then confronted diagrammatically for each program area, with the specific targets in a matrix allowing the description of the situational analysis, which ultimately will orient the selection of activities to be performed in close relationship with the priority problems of the health sector.

In a second step, sets of activities were compiled following two different approaches: the first led to a rather detailed and bulky document, impractical for routine use and the second, to a format defining general lines of work which only countries will need to expend further for implementation. This second approach appears more practical

in view of the total amount of programs to be handled at country level, once the Organization have MTP for all Divisions. The same considerations will also be applicable to the third part of the document which relates to activities, locations and requirements.

D. SITUATION ANALYSIS

This analysis has been made on the basis of the interdivisional objectives, aiming at a description of the situation of each one of the four priority areas of the Organization's program in regard to those aspects directly related to human resources planning, development, and administration.

(1) Interdivisional Objective 1 and 1.1

In 1977, the population of Latin America and the Caribbean will reach 340 million, of which 47% is settled in the rural areas. It is estimated that 40% of the total population has no practical access to health services. At present, there are different ways of confronting the problem of health for underserved populations. First of all, there is a general shortage of human resources to extend the coverage of the services, and the health personnel at peripheral areas is not trained to develop community work and obtain its participation. Some countries have attempted to tackle this problem by establishing regionalized health care systems with clearly defined levels of care and are promoting the development in rural and peripheral areas of primary health care. It is expected that in the coming few years most countries will follow the same line.

The occupational structure is marked imbalanced toward higher levels, oriented to individual care, and concentrated in larger urban areas. There is a marked insufficiency of personnel at the intermediate level and training for this personnel, as well as for auxiliaries, is inadequately structured, organized and recognized. Professional schools in general, and schools of public health, in particular, need to be strengthened and their training programs reoriented and updated. At the present time, only very few countries have systems for training technical and administrative personnel for the different levels of health care in a regionalized system. In most countries, there are some isolated attempts which do not constitute a specific educational policy, especially when confronted with reality in health practices which is often completely opposite (multi-systems, predominant curative medicine practices, etc.). This fact is much more evident on the professional level. Intermediate and auxiliary level training programs are much more suited to the needs of the health services because of their in-service nature. In Latin America, at the present time, there are approximately 110 dentistry schools, 174 medical schools, 258 nursing schools, 28 nutrition institutes, 65 veterinary medicine schools, 27 health management schools, 13 sanitary engineering schools, 79 obstetrics schools, 22 schools for laboratory techniques, 13 X-ray techniques schools. There are many courses for in-service training for the last two categories of medical technicians and for health auxiliaries. The student population, not including students in courses for auxiliaries, exceeds 3,000,000.

In these institutions, many efforts have been undertaken to implement educational development programs using modern educational technology which facilitates a more effective teaching/learning process. Above all, attempts have been made to respond to the great demand for health science courses in the Region by providing different solutions. All of these nonsystematized efforts have basically come as a response to educational demands made by the training institutes. More recently, greater cooperation between the service institutions and the training institutes has led to the implementation of educational development programs that introduce the concept of integrated teaching and assistance, or work and education, in order to incorporate the student into work in the health field at an early stage. This integration requires new agreements based on plans for action developed in activities in the health services and requires an actual element of service. Therefore, self-instruction and evaluation procedures based on performance and not simply on knowledge are encouraged. The preceding program is much more necessary on the technical and auxiliary levels because the number of people who must be trained requires "large scale" training procedures if the demand for personnel is to be met in a short time.

If we relate this change in the teaching/learning process to participation of informal subsystems and the general community, then procedures such as adult education and psychosocial methods in general education, which have been adapted to the health field, must be incorporated into the program. At the present time, these aspects are rarely applied in this field. Suitable instruction materials must be entirely developed in the teaching/learning process, both in training and in adapting personnel to the health service's new requirements (continuing education). In most cases, such material is either lacking or is insignificant. PAHO/WHO Programs of Medical and Nursing Textbooks can be noted as initial or pilot models. Educational material has been produced sporadically in these countries, but distribution and use of such material has not been systematized. There is much less material for use on informal subsystem and community levels.

By 1977, all countries have established some mechanisms, formal or informal, for the coordination of manpower training and its utilization by the health services. Fourteen countries of Latin America and the Caribbean have recently established, in the Ministries of Health, divisions or departments of human resources with overall responsibility for the health manpower coordination and planning at the national level. It is expected that in the coming few years, most of the countries will establish and develop their manpower units.

In the field of manpower administration, the management of Human Resources is generally carried out under a narrow approach of administration of personnel. The progressive integration of the health sector and the definition of levels of services in schemes of regionalization, will require a substantially different approach.

Many elements of the present management of personnel are insufficiently developed, such as regulations for civil service in the health sector, salary scales, administrative practices. Some elements--which are vital in a Regionalized Health System, such as staff development, career ladders and lattices, are nonexistent. In all countries, there is a scarcity of personnel trained in health care administration. Seventy percent of the hospitals with more than 100 beds are under the direction of staff with no training in administration.

A last limitation has important bearing on the health care administration. Most educational and training programs are oriented towards hospital administration and do not fully prepare the administrator for his role in the whole network of a Regionalized Health System or for his role in the integration of teaching and services.

No country has an operational policy for the training of personnel in health care administration. Similarly, the policies for the utilization of personnel in health care administration are insufficiently developed. With few exceptions, incentives to attract and retain professional personnel in health care administration, such as career opportunities, salary scales, and continuing education, are not developed.

In the field of continuing education, a survey of 23 countries has shown a complex situation where the numerous activities of continuing education--most of them being either sponsored or financed by the Ministries of Health and executed in cooperation with universities--respond in fact to the scientific interests of the professionals rather than to the needs of the services. Most of the 155 programs of continuing education identified in Latin America and the Caribbean, are circumstantial and episodic activities, executed in a strict profession by profession approach and they reach each year an average of less than 5% of the health personnel. Continuing education programs do not intend to reach the community nor any of the workers of the "Informal Subsystem" of health care delivery.

An important aspect of the overall inadequacy of the training programs, as well as of the continuing updating of knowledge in the field of health is the lack of modern methods for compilation, analysis, and dissemination of scientific and technological information which could provide encouragement and support for the necessary changes.

The Regional Library of Medicine and the Health Sciences (BIREME), and its network of regional libraries are initiating efforts in this respect. At the present, these libraries include 10 National Information and Documentation Centers (CNID) which operate relatively efficiently. Through this system, attempts are being made to disseminate selective information in fields related to health services, regionalized systems, extension of coverage, primary care, and other services. Relatively effective levels of dissemination have not yet been achieved. Even less has been done with information regarding Latin America's recent experiences, and there is even less information on the involvement of informal subsystems and participation of the community itself.

Among personnel serving in Latin America at the present time, there are more than 700,000 potential users of information on different levels. The medical level alone includes more than 200,000 users.

(2) Interdivisional Objective 2

Most of the limitations mentioned under the first interdivisional objective area (1 and 1.1)-- that is in relation to the global health manpower and the overall network of services--are equally valid for the specific personnel and services of maternal and child health, nutrition, mental health, and other component of family health programs. In addition, some specific limitations or drawbacks affect particularly the family health activities.

In the field of manpower coordination and planning, the main drawback is the incomplete assessment of manpower requirements for maternal and child health, nutrition, family planning, and other activities. As a consequence, these activities are performed by general health personnel--which is often scarce and unprepared--or worse, these activities are not satisfactorily performed or not performed at all.

Even when manpower requirements for the basic programs are determined, this determination is rarely done according to the several levels of care of a regionalized network of services, which is one of the proposed objectives. Elementary activities to be performed by the community itself are not defined; as a consequence, the requirements for health personnel in primary care cannot be established and, in turn, the number and quality of technicians, professionals and specialists needed at the other levels to attend the referrals, supervise and orient the primary care personnel cannot be determined. This results in a very loose planning and programming of the personnel and a haphazard conduction of programs.

Training of personnel in most countries of the Region, does not take into consideration the range of activities and health actions presently being applied or in the process of further development at the level of the health services in dealing with specific priority areas such as maternal and child care and nutrition. These subjects are not clearly identified in the curriculum of the different professions and the resources available to teach them are not sufficiently strengthened by the educational institutions, once they are more oriented to activities related to individual and curative care. Yet, the educational programs on these matters does not provide enough involvement on field experience at community level. The lack of coordination among the professional schools and some specialized institutions in the area (e.g. institutes of nutrition) has prevented the utilization of higher qualified personnel in the training of specialized administrators and supervisors in quantity and quality demanded for the extension of coverage of health services to underserved population. Community health workers in the area are not adequately trained for dealing with problems of protein-calorie malnutrition especially in mothers and children.

In the field of family health, the need for dissemination of selective information is obvious and some attempts have been made in this respect. These attempts have been basically concerned with the maternal and child element and, to a lesser degree, with the nutrition problem. In addition to the schools of medicine and nursing which have incorporated maternal-child aspects into their curricula, there are presently 28 schools of nutrition and 79 schools of obstetrics with very weak educational development programs. The use of modern educational technology and materials concerning the maternal-child and nutritional fields has been attempted on the undergraduate medical and nursing levels, but has been sadly ignored in the nutrition and obstetrics schools. There is an evident lack of instructional material for the technical and auxiliary level, especially material on community participation. At the present time, there are 100,000 students in both nutrition and obstetrics with a possible demand in the family health field for 269,000 health workers.

It should be pointed out, however, that in this particular field, a very active program of continuing education has been developed in Latin America and many specific programs already exist in maternal and child health, nutrition, family planning, pediatrics, obstetrics, cancer screening, mental health, etc. Only two limitations diminish the returns of the programs of continuing education:

- Most of the programs are conducted for only one of the members of the health team and do not reach the other members.
- Most of the programs are not delivered through the structure of the health services and do not reach the personnel serving in the peripheral areas. As most maternal and child health family programs are still conducted as vertical programs--and the specific financing of the family planning agencies aggravate this tendency--the activities of continuing education may not be integrated in the overall services and must suffer from alternatively abundant and short funding.

In the field of administration, despite the efforts made for the training of administrators for maternal and child health and family planning programs, the shortage of qualified health administrators at the intermediate and lower level of services--or the poor understanding that administrators have of family health care--is a serious limitation for the development of the programs.

(3) Interdivisional Objective 3

Similarly to the previous chapter, some of the comments made on family health programs and personnel are applicable to specific disease control programs--non-integration in the health services, verticality of programming and financing, extreme specificity of the technical field, etc. The same difficulties can be identified in this area.

In manpower coordination and planning, the requirements of personnel for the programs are not determined by any planning mechanism. This results in shortages, overlapping of functions, unspecific training, poor performance.

Some scheme of extension of coverage give a fundamental importance to the peripheral network of laboratories as a first backing up activity for primary care. Several health services are conscious of the necessity to plan the manpower for laboratory services and it is expected that this crucial area will soon be a matter of general concern.

The health personnel working in the field of disease control, particularly those involved in main programs of control and eradication of prevalent diseases (e.g. malaria, tuberculosis, onchocerciasis, schistosomiasis, etc.), have valuable experience in the contact with the communities. Nevertheless, for reason of the vertical structure of these programs their activities have been restricted to direct aspects of the campaign against specific diseases. As a consequence, new training programs should prepare this personnel in a more comprehensive work, in better coordination with primary health services. Infectious and chronic diseases are not well registered through data recorded in the countries. The principal factors affecting this problem are: lack of simple surveillance systems at peripheral levels and regionalized reference laboratories that could be used in the diagnosis of principal diseases. As the health systems improve in the control of diseases, it will be necessary that health personnel be trained for the accomplishment of these tasks. Health activities at peripheral level together with community participation should have the approach of control and promotion and not solely as care for those demanding services. For this, a major change has to be introduced in the training programs, particularly for those acting as supervisors of health programs.

The Region has always been concerned with the dissemination of information about communicable diseases. This information is valuable because of the similarity of conditions in the Latin American and Caribbean countries. Some valuable efforts have been made to disseminate information (for example, PAHO/WHO scientific publications, the Manual of Infectious Diseases, etc.). However, the dissemination of information concerning the most recent advances in the world or even in the Region has not been systematized. The undergraduate level sometimes approximates this program, but efforts are generally inconspicuous and isolated within the overall training process. In some cases, the introduction of modular teaching, diseases oriented curriculum, typical problems of the more common communicable diseases or actual health problems encountered at countries' level has provided the students with a greater understanding of the problem.

Epidemiological concepts, epidemiological surveillance and more efficient management of laboratory tests should be basic elements of the training process. In order to implement all of these aspects, it will be necessary to encourage the development of interdisciplinary teaching units that focus mainly on communicable diseases. Modern educational technology will be used to make these courses more efficient. Similarly, the preparation of suitable instructional materials is indispensable. Due to the great number of actual situations typical of the countries of the Region, these materials should be produced locally.

In the field of continuing education, relatively few programs reach the malaria workers or the rural auxiliaries in charge of the control of parasitic diseases.

Very few programs reach the general health personnel--auxiliaries, nurses, physicians, pharmacists--to deliver useful education or information on communicable disease control and to develop a positive attitude toward disease control programs.

In the field of manpower administration, even though some programs have a remarkable administration of personnel, the majority of such personnel is not under a positive management that allows or elicit human resources development.

In the field of health care administration, very few administrators at the intermediate and lower level, are trained and prepared to give full support to disease control programs or to give full recognition to laboratory services and their importance in the extension of coverage.

(4) Interdivisional Objective 4

Because of their specificity and their non-medical staffing, the programs and activities of environmental health are not always included in the manpower planning nor in the programs of continuing education of the Ministries of Health.

In the field of manpower coordination and planning, there is an interest in most countries to conduct surveys of environmental health personnel and improve its planning.

A major priority in this field has been assigned to water supply, solid waste disposal, and environmental pollution. Specific information on the levels of staff and training requirements for each of these categorical areas is limited. Presently, there is no training program in existence that is organized or planned to reach all personnel working in water supply, sewerage, and solid waste services. It is also evident that it is virtually impossible to expect that the necessary staff will be trained with present practices and within the structures and approaches in use, and this indicates that all personnel in the health services should receive some basic training on environmental health, as well as the need for improving the training and utilization of intermediate and auxiliary level personnel in the area.

Some environmental health activities are presently being developed in the information field such as a network of information centers in environmental health and the sanitary engineering and human ecology centers. A closer relation between these centers and the Regional Network of National Information and Document Centers is necessary. At the present time, there are 13 sanitary engineering training programs, more than 45 graduate courses and an undetermined number of in-service training courses for technical and auxiliary personnel in environmental health. So far, educational development programs, and especially modern educational technology, have not been incorporated into these courses. In its plans, CEPIS will try to meet this goal, but will require specialized assistance. Similarly, it is necessary to develop instructional material, especially manuals and audiovisual aids for technical and auxiliary personnel.

In the field of continuing education, a pressing need is felt to prepare and execute programs of continuing education for specialized personnel--sanitary engineers, sanitary inspectors, water systems operators, auxiliaries of sanitation. Similarly, the need is felt for continuing education programs directed to the general health personnel--auxiliary, nursing personnel, pharmacists, physicians, as well as social workers, educators and the community itself--to update the knowledge of environmental health and human ecology required by each level and profession and develop a favorable attitude that would strengthen environmental health programs. More specific continuing education is needed in special areas such as accident prevention, occupational health, etc.

In the field of manpower administration, the same remarks made for other programs are equally valid.

CHRONOGRAM OF ACTIVITIES AND OUTPUT INDICATORS

TARGET 1.1: BY 1983, 75% OF THE COUNTRIES IN THE REGION WILL HAVE ESTABLISHED EFFECTIVE COORDINATION BETWEEN EDUCATIONAL AND SERVICE INSTITUTIONS ENGAGED IN HEALTH ACTIVITIES, AS MEASURED BY EVIDENCE OF A GREATER NUMBER OF PROGRAMMES BASED ON COMMON POLICIES, RESOURCES AND GOALS.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 1.1.1	PROMOTION OF DIALOGUE AMONG ALL SECTORS INVOLVED IN HEALTH SERVICES AND MANPOWER DEVELOPMENT					
	Follow up of proposals and recommendations of the 1977 Regional Meeting on Education and Health Care. Promotion of multisectorial	Introduction of intersectoral approaches in the preparation of the World Conference in Medical Education. approaches to the study of health services and health manpower	Participation in the World Conference on Medical Education. Quantitative and qualitative participation in the World Conference on Medical Education.	Follow up of the proposals and recommendations of the World Conference on Medical Education. Promotion of joint task forces: PAHO-ILO-OAS-UNESCO, for the study of upcoming issues.	Preparation of integrated educational and services inputs to the Pan American Conference on Health Manpower Planning.	
Output Indicators	Quantity and quality of advisory services rendered to the countries for the development of integrated programs.					
ACTIVITY: 1.1.2	PROMOTION OF STUDIES BY NATIONAL GROUPS ON COORDINATION BETWEEN HEALTH SERVICES AND MANPOWER DEVELOPMENT MECHANISMS					
	Support to national studies on health services and manpower development. Coordination between activities 1.2.3 (Manpower Planning), 1.4.1 (Career Schemes), 1.4.3 (Utilization of Personnel), 2.1.2 (Criteria for Training Programs), 2.1.4 (PLADES), in order to produce materials and knowledge that will stimulate national studies in coordination between health services and manpower development.					
Output Indicators	Number and quality of national studies on coordination mechanisms between health services and manpower development.					
ACTIVITY: 1.1.3	DEVELOPMENT OF MECHANISMS FOR COORDINATION OF HEALTH SERVICES AND MANPOWER DEVELOPMENT					
	<u>Latin American Program on Educational Development and Health - Activity 2.1.4</u>					
	Promotion, within the PLADES Program, of informal intersectorial committees for the coordination and support of integrated activities in manpower education and training, within the framework of health services; participation of teachers and students in the health care delivery and realization of integrated research - The intersectorial committees will promote and support other regional (sub-national) groups to the same effect, as to create in the countries the conditions for an integrated development of the health services and health manpower - Periodical evaluations of the number and productivity of existing committees.					
	Promotion of the participation of teaching institutions in health manpower planning processes.	Continuation. Two seminars on manpower coordination and planning for teaching institutions. Areas IV and V.	Continuation. Two seminars on manpower coordination and planning for teaching institutions. Areas II and VI. Preparation of the manpower units of the Ministries of Health for interinstitutional participation in planning.	Promotion of interinstitutional planning groups in 4 countries. Continuation. Coordination with activity 1.2.1 and 1.2.3.	Technical cooperation between the 4 interinstitutional planning groups. Continuation. Coordination with activity 1.2.3.	Promotion of participation of teaching institutions in health manpower planning.
Output Indicators	Number and productivity of coordination committees.		Number and productivity of coordination committees.		Number and productivity of coordination committees.	
	Quality of the coordination obtained between institutions engaged in health services and health manpower development.					

TARGET 1.2: BY 1983, 60% OF THE COUNTRIES IN THE REGION WILL HAVE IMPROVED ITS HEALTH MANPOWER PLANNING CAPABILITY AS EVIDENCED BY AN INCREASED NUMBER OF COUNTRIES DEVELOPING SOUNDLY BASED NATIONAL HEALTH PLANNING, INCLUDING THE PREDICTION OF MANPOWER REQUIREMENTS.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 1.2.1	DEVELOPMENT OF MANPOWER PLANNING METHODOLOGY					
	Workshop on the assessment of Human Resources of the Informal subsystem.	Workshop on Health Manpower Policy Analysis and Formulation.	Workshop on Health Manpower Standards Analysis and Formulation.	Workshop on Educational National Planning and its Relations to Health Manpower Planning.	Workshop on Analytical and Formulation Techniques in Health Manpower Plans.	
	Development of methods for the determination of health manpower requirements in priority areas and				preparation of staffing guidelines.	
	.MCH and nutrition .Laboratory services .Water supply and sewage	.MCH and nutrition .Laboratory services .Occupational health	.Comprehensive family health .Disease control	.Family health .Disease control .Administration	.Family health .Disease control	.Family health .Disease control
Output Indicators	Methodological and staffing guidelines prepared.	Methodological and staffing guidelines prepared.	Methodological and staffing guidelines prepared.	Report prepared and published.	Methodological and staffing guidelines prepared.	Staffing guidelines completed.
ACTIVITY: 1.2.2	INFORMATION SYSTEMS TO MONITOR REQUIREMENTS					
	Improvement of data collection storage and retrieval in 7 countries.	Improvement of data collection storage and retrieval in 10 countries.	Improvement of data collection storage and retrieval in 3 countries.	Improvement of data collection storage and retrieval in 2 countries.		
	Determination of health manpower requirements in 3 countries.	Determination of health manpower requirements in 8 countries.	Determination of health manpower requirements in 10 countries.	Determination of health manpower requirements in 5 countries.	Development of standard analytical processing in 2 countries.	Development of standard analytical processing in 2 countries.
Output Indicators	Number of health manpower information systems, requirements and forecast established	Number of health manpower information systems, requirements and forecast established	Number of health manpower information systems, requirements and forecast established	Number of health manpower information systems, requirements and forecast established	Number of health manpower information systems, requirements and forecast established	Number of health manpower information systems, requirements and forecast established
ACTIVITY: 1.2.3	MANPOWER POLICY ANALYSIS AND PLANNING					
	Subregional seminar on Health Manpower Planning for Central America.	Subregional seminar on Health Manpower Planning for the Andean Area.	Subregional seminar on Health Manpower Planning for the Caribbean Area.	Subregional seminar on Health Manpower Planning for Areas V and VI.	Preparation of the II Pan American Conference on Health Manpower Planning. (PACHMP)	Final preparation, realization and follow-up of the II PACHMP.
	Development of health manpower policy in 3 countries.	Development of health manpower policy in 8 countries.	Development of health manpower policy in 12 countries.	Analysis and standards analysis in 15 countries.	Formulation and formulation in 7 countries.	Overall planning for 1984-89.
	Formulation of health manpower plans in 12 countries.	Formulation of health manpower plans in 2 countries.	Formulation of health manpower plans in 12 countries.	Formulation of health manpower plans in 13 countries.	Formulation of health manpower plans in 15 countries.	Formulation of health manpower plans in 15 countries.
Output Indicators	Programs of work established in Central America.	Programs of work established in the Andean Area.	Programs of work established in the Caribbean Area.	Programs of work established in Areas V and VI.	Guidelines for the preparation of basic documents for the II Pan American Conference on Health Manpower Planning (PACHMP) issued.	Conference completed. Overall program of work completed and accepted.
		Number of countries having established the different elements of the health manpower planning process.	Number of countries having established the different elements of the health manpower planning process.	Number of countries having established the different elements of the health manpower planning process.	Number of countries having established the different elements of the health manpower planning process.	Number of countries having established the different elements of the health manpower planning process.
ACTIVITY: 1.2.4	TRAINING IN HEALTH MANPOWER PLANNING					
	First course on Health Manpower Planning.	Second course on Health Manpower Planning and evaluation	Third course on Health Manpower Planning.	Fourth course on Health Manpower Planning and evaluation		
	Two training sessions in specialized aspects of health manpower planning.	Two training sessions in specialized aspects of health manpower planning.	Two training sessions in specialized aspects of health manpower planning.	Two training sessions in specialized aspects of health manpower planning.	Two training sessions in specialized aspects of health manpower planning.	Two training sessions in specialized aspects of health manpower planning.
Output Indicators	Course completed.	Course and evaluation completed. New program prepared	Course and training sessions completed.	Course and training sessions and evaluation completed.	Training sessions completed.	Training sessions completed.

TARGET 1.3: BY 1983, 70% OF THE COUNTRIES IN THE REGION WILL HAVE DEVELOPED ITS MANAGEMENT TRAINING CAPABILITY AS EVIDENCED BY THE INCREASE AND IMPROVEMENT OF EXISTING PROGRAMMES IN THE AREA LEADING TO AN INCREASE IN THE NUMBER OF COMPETENT HEALTH SERVICES MANAGERS, AND THEIR UTILIZATION.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 1.3.1	EVALUATION AND SUPPORT OF EXISTING PROGRAMS FOR MANAGEMENT TRAINING					
	<u>Educational Support to existing training programs in Health Care Administration</u>					
	Publication of periodic directories in Health Care Administration Education: Training programs, faculty and research. Periodic publication of a bulletin in Health Care Administration Education. Development of education technology: libraries, textbook program in Health Care Administration. Clearinghouse and dissemination of educational materials.					
	Workshop on "teachers evaluation and profiles"	Workshop on "library role and policies"	Workshop on "library users sensibilization"	Workshop on "librarian training"	Workshop on "library and biomedical information systems"	Workshop on "library evaluation methods"
	Faculty specialization: identification of needs and resources	Workshop on "task analysis techniques"	Workshop on "objectives analysis and instructional goals"	Workshop on "microeducation technique"	Workshop on "teaching material development"	Workshop on "use of audiovisual"
		Workshops for faculty members.	Specialization of faculty through academic training and intercountry exchange of faculty.			
	<u>Technical Support to existing training programs in Health Care Administration</u>					
	Intercountry workshop on "primary care, ambulatory and emergency care for the extension of coverage"	Intercountry workshop on "community participation and organization behavior"	Intercountry workshop on "cost containment and control"	Intercountry workshop on "industrial relations"	Intercountry workshop on "information systems and electronic data processing"	Intercountry workshop on "functional planning and design of health facilities"
	Intercountry task force on "health care organization"	Intercountry task force on "social science in health care administration"	Intercountry task force on "financial management"	Intercountry task force on "personnel administration"	Intercountry task force on "qualitative methods in health care administration"	Intercountry task force on "hospital maintenance and biomedical engineering"
Output indicators	Workshops completed. Report issued	Workshops and task forces completed. Reports and directories issued	Workshops and task forces completed. Reports and directories issued	Workshops and task forces completed. Reports and directories issued	Workshops and task forces completed. Reports and directories issued	Workshops and task forces completed. Reports and directories issued
ACTIVITY: 1.3.2	SELECTION, PLANNING AND SUPPORT OF REGIONAL AND SUBREGIONAL PROGRAMMES FOR MANAGEMENT TRAINING					
	<u>Development of Advanced training centers in Health Care Administration</u>					
	Survey of possible host institutions. Preparation of proposals and plans of operation for two advanced training centers	Planning and implementation of two centers. Launching of training programs				
	Continuation of support to three advanced training centers in Brazil, Colombia and Mexico	Support of activities in the five training centers in the area of field experience residency	Continuing support and coordination of the five advanced training centers: Training of faculty, training of preceptors, supervision of thesis and monographs, research activities, curriculum review, educational technology, permanent evaluation of planning educational process and output of the five centers. Programming of future activities.			
	<u>Integration of training and services in Health Care Administration</u>					
	"In-service training" in Health Care Administration: Study of baseline situation	Workshop for the "in-service training" teachers	Follow-up of workshop and support of activities	Workshop for the "in-service training" teachers	Follow-up of the workshop and support of activities	Workshop for the evaluation of "in-service training"
	Intensive training in Health Care Administration: Identification of needs and resources	Intensive course for health care mid level executives	Intensive course for health care mid level executives	Intensive course for health care mid level executives	Intensive course for health care mid level executives	Intensive course for health care mid level executives
	Independent study programs in Health Care Administration: Identification of needs and resources	Definition of objectives Design of curriculum Preparation of materials	Independent Study Program Phase I, program 1	Independent Study Program Phase II, program 1 Preparation of Phase I, program 2	Evaluation of program I	Evaluation of the Independent Study Programs 1 and 2
	Training of Practitioners/Directors - Preparation of seminars	Three seminars in 3 countries	Four seminars in 4 countries	Five seminars in 5 countries	Six seminars in 6 countries	Evaluation of seminars for practitioners/directors
	Development of new models of health care delivery systems: preparation	Country selection and data collection of Model I	Construction and test of Model I	Evaluation of Model I. Country selection and data collection of Model II	Construction, test and evaluation of Model II	Decision on changes in the health care delivery system according to models
Output indicators	Five centers of operation completed at the five centers	Five centers in operation	Effective support to 5 centers	Effective support to 5 centers	Effective support to 5 centers	Course, workshop and seminars

TARGET 1.4: BY 1983, 50% OF THE COUNTRIES IN THE REGION WILL HAVE ESTABLISHED CAREER DEVELOPMENT AND CONTINUING EDUCATION AS EVIDENCED BY CLEARLY DEFINED CAREER STRUCTURES FOR HEALTH PERSONNEL LINKED TO COMPREHENSIVE NATIONAL PROGRAMMES OF IN-SERVICE EDUCATION.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 1.4.1	ASSESSMENT OF EXISTING PATTERNS OF CAREER DEVELOPMENT AND DESIGN OF ALTERNATIVE SCHEMES					
		Regional study on career patterns in health occupations.	Workshop on career patterns in the Regionalized Health System	Preparation of guidelines for the design of career ladders and lattices in the Regionalized Health System.	Technical cooperation with the Ministries of Health in the field of career development.	
<u>Output Indicators</u>		Study completed.		Guidelines prepared and distributed.	Career development patterns established in the countries.	Career development patterns established in the countries.
ACTIVITY: 1.4.2	DEVELOPMENT OF PROCEDURES TO IMPLEMENT ALTERNATIVE SYSTEMS OF CONTINUING EDUCATION					
	<u>Technical cooperation with the existing programs of continuing education</u>					
	Strengthening of existing programs.	Coordination and synchronization between programs in each country.	Extension of geographic coverage of the programs.	Expansion of scope of the programs.	Incorporation of continuing education in the informal subsystem.	Progressive decentralization of programs.
	<u>Regional Program of Continuing Education for Health Personnel</u>					
	Phase I - Group A - Implementation, execution, and evaluation of programs in 4 countries: Colombia, Honduras, Guatemala, Ecuador - Establishment of one Reference Center.	Phase I - Group B - Implementation, execution, and evaluation of programs in 4 countries: Bolivia, Dominican Republic, Nicaragua, Peru.		Phase II - Group C - Implementation, execution, and evaluation of programs in 4 countries of Group C: Caribbean, El Salvador, Paraguay. Establishment of one Reference Center.		
	Preparation of country projects of Group B.	Negotiation of Phase II. preparation of country projects of Group C.		Phase II - Group D - Implementation, execution, and evaluation of programs in 4 countries of Group D: Costa Rica, Mexico, Panama, Surinam.		
	<u>Development of Continuing Education Programs for all categories of personnel in priority areas: family health, disease control, environmental health</u>					
	Preparation of a first cycle of continuing education in MCH and nutrition.	Testing and utilization of the first cycle in 6 countries.	Preparation of a second cycle in MCH and nutrition, and environmental sanitation.	Utilization of second cycle in 3 countries.	Expansion of the cycles to comprehensive family health and environmental health.	Incorporation of continuing education cycles in the country programs in 16 countries.
	Environmental sanitation.	Preparation of a first cycle in communicable diseases, laboratory, and malaria.	Testing of the first cycle in communicable diseases in 3 countries.	Preparation of a second cycle in disease control.	Utilization of second cycle in disease control in 3 countries.	
<u>Output Indicators</u>	Percentage of health personnel reached in each country by any alternative scheme of continuing education.	Percentage of health personnel reached in each country by any alternative scheme of continuing education.	Percentage of health personnel reached in each country by any alternative scheme of continuing education.	Percentage of health personnel reached in each country by any alternative scheme of continuing education.	Percentage of health personnel reached in each country by any alternative scheme of continuing education.	Percentage of health personnel reached in each country by any alternative scheme of continuing education.
ACTIVITY: 1.4.3	DEVELOPMENT OF SCHEMES FOR THE MONITORING OF THE UTILIZATION OF HEALTH PERSONNEL					
	Regional study on health manpower expenditures.	Workshop in health manpower economics.	Preparation of guidelines for the analysis of manpower investments and recurrent costs.	Technical cooperation with the Ministries of Health in the field of health manpower economics.		
	Workshop on manpower management and administration of personnel.	Comparative study on patterns of manpower administration.	Preparation of guidelines on manpower management	Preparation of guidelines for the review of salary scales.	Technical cooperation with the Ministries of Health in the field of manpower management.	
<u>Output Indicators</u>	Study completed. Report issued.	Report issued. Study completed.	Guidelines prepared.	Guidelines prepared.	Guidelines prepared.	Guidelines prepared.

TARGET 1.5: BY 1983, 30% OF THE COUNTRIES IN THE REGION WILL HAVE PROMOTED THE DISCOURAGEMENT OF UNDESIRABLE MIGRATION OF HEALTH PERSONNEL AS EVIDENCED BY THE LOCATION AND RETENTION OF THEM IN THE COUNTRIES, AND PLACES WITHIN THE COUNTRIES, WHERE THEY ARE MOST NEEDED.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 1.5.1	ASSESSMENT OF PRESENT SYSTEMS OF MUTUAL RECOGNITION OF QUALIFICATIONS AND DIPLOMAS					
	Technical and budgetary preparation of an Inter American study on certification.	Inter American study on certification in selected fields.	First Working Group on Certification in selected fields.	Expansion of the Inter American Study on Certification.	Second Working Group on Certification.	
<u>Output Indicators</u>	Protocol established and budget secured.	Study completed.	Report on certification issued.	Second round of the study completed.	Final report issued.	
ACTIVITY: 1.5.2	DEVELOPMENT OF STRATEGIES TO CONTROL UNDESIRABLE MIGRATION AND COOPERATION WITH COUNTRIES IN IMPLEMENTING THEM					
		Seminar on the study of health manpower migration.		Caribbean Conference on Health Manpower Migration.		
<u>Output Indicators</u>	Technical cooperation between the countries in close association with activity 1.4.1 and 1.4.3.					
	Technical cooperation given to the countries in response to specific requests.					

TARGET 2.1: BY 1983, AT LEAST 60% OF THE COUNTRIES IN THE REGION WILL HAVE DEVELOPED OR STRENGTHENED EDUCATIONAL INSTITUTIONS WITH EMPHASIS ON THE INTERMEDIATE AND AUXILIARY LEVELS, AS EVIDENCED BY THE INCREASE OF TOTAL HEALTH PERSONNEL, PARTICULARLY THOSE IN CHARGE OF PRIMARY HEALTH CARE SERVICES TO UNDERSERVED POPULATIONS.

	1976	1979	1980	1981	1982	1983
ACTIVITY: 2.1.1	COLLECTION, MAINTENANCE AND DISTRIBUTION OF INFORMATION REGARDING TRAINING INSTITUTIONS					
	-Continuing updating information on training institutions for the WHO directory of Health Science Education. -Preparation of Regional Directory of Schools of Medicine and Public Health.	-Preparation of Regional Directory of Schools of Nursing and Midwifery.	-Preparation of Regional Directory of Schools of Dentistry and Pharmacy.	-Preparation of Regional Directory of Training Programs in Environmental Health and Veterinary Medicine.	-Updating Regional Directory of Schools of Medicine and Public Health.	-Updating Regional Directory of Schools of Nursing and Midwifery.
Output Indicators	-Continuing updating information on training programs and auxiliary personnel -Issue of Regional Directory.	-Issue of Regional Directory.	-Issue of Regional Directory. -Updated listing referred to Headquarters.	-Issue of Regional Directory.	-Issue of Regional Directory. -Updated listing referred to Headquarters.	-Issue of Regional Directory.
ACTIVITY: 2.1.2	ESTABLISHMENT OF CRITERIA FOR AND SUPPORT TO THE DEVELOPMENT OF NEW TRAINING INSTITUTIONS AS WELL AS THE REFORM OF EXISTING ONES					
	-Collaboration in the design and implementation of special programs of institutional development assisted by national funds or funding agencies. -Assistance to requests regarding institutional and program development. -Follow-up of regional meeting in 1976 (Caracas) and 1977 (Washington on same subject). -Follow-up of special meeting (1977) on interdisciplinarity education, research and services. -Cooperation with countries in the identification of the needs for nurses practitioners and other categories of health personnel (environmental health, dental health, veterinary medicine and for specific health fields -maternal and child health, pediatrics, public health- and in establishing educational programs. -Cooperation with the existing courses of nurses practitioners -identification of training needs and specific supporting learning materials. -Discussion on functions, utilization and educational programs for nurses practitioners.	-Assistance continued. -Review and/or establishment of criteria for organizational changes in existing institutions. -Discussion on patterns of career and training through in-service educational programs. -Analysis of experience with interdisciplinary approach in the teaching learning process as related to health services and community development.	-Assistance continued. -Assistance continued. -Assistance continued. -Assistance continued.	-Assistance continued. -Assistance continued. -Assistance continued. -Assistance continued.	-Assistance continued. -Assistance continued. -Assistance continued. -Assistance continued.	-Assistance continued. -Assistance continued. -Assistance continued. -Assistance continued.
Output Indicators	-Report on interdisciplinarity applied to education, research and services.	-Report on criteria and systems on creation of new institutions.	-Report on patterns of career. -Case studies on experienced in-service training.	-Issue of guidelines for preparation of nurses practitioners.	-Report on main experiences in interdisciplinarity.	-Publication on in-service training experience and results.
ACTIVITY: 2.1.3	STRENGTHENING OF TRAINING INSTITUTIONS ORIENTED TO FILL SPECIFIC IDENTIFIED GAPS IN THE COMPOSITION OF THE HEALTH TEAM					
	-Follow-up the elaboration of a guide for training of rural health auxiliary nursing personnel and a regional course for instructors of auxiliary programs. (1977). -Selection of centers and trial of new models and techniques for the preparation of rural health auxiliaries and nursing personnel on programs based on problem-solving and interaction auxiliary-community. -Development of short courses for training the teachers of selected centers in the new approach to auxiliary training. -Follow-up of workshop on Training and Education of Technical and Auxiliary Personnel, and related activities in 1977.		-Revision of experiences and achievements on training and auxiliary personnel in selected countries or areas (e.g. Central America, Caribbean, Andean Countries, Brasil, Cuba, Mexico).		-Extension of the project-design of studies for the evaluation of the different approaches in the training of rural health auxiliaries - development of guidelines and recommendations. -Revision of curriculum, adjustment according identified needs. -Continuation of teachers training through in-service education program.	-Comparison of teams in different country situations by levels of health services.
Output Indicators	-Listing of centers for preparation of rural health auxiliaries.	-Report of case studies on auxiliary and technical personnel.	-Report on strategy for health team development.	-Guidelines on the preparation of technical and auxiliary personnel.	-Issue of guidelines on training of rural health auxiliaries.	-Description of characteristics of team work in different settings.
ACTIVITY: 2.1.4	COMPARATIVE ANALYSIS OF, AND SUPPORT THROUGH NETWORKS OF NATIONAL GROUPS TO, NON-TRADITIONAL SCHEMES OF INSTITUTIONAL AND PROGRAMME DEVELOPMENT					
	-Research and development by national groups on inter-institutional coordination. Follow-up of activities in 1976-77 with the Latin American Program of Educational Development in Health (PLADES). Development of strategies of technical cooperation--identification of new national groups, exchange of experiences, and evaluation. -Preliminary study of mechanisms used in the coordination of Health Services Institutions and Manpower Development programs in selected countries through national groups.	-Continuation of activities in PLADES with the Núcleo de Investigación y Desarrollo Educativo en Salud (NIDES). -Description of national experiences.	-Continuing activities with NIDES. -Evaluation of results and experience through special meeting of representatives from different coordination committees.	-Implementation of mechanisms of coordination through national groups and support to establish national networks of integrating training with services. -Development of strategy to improve cooperation and rationale on the utilization of inter national resources on health manpower development. -Design of strategy for expansion of national experience in selected countries.	-Analysis of results and design of new mechanisms of coordination, training and evaluation to be applied to all categories of health personnel. -Evaluation of results through special meetings with representatives of different coordination groups and development of new strategies for technical cooperation.	

TARGET 2.2: BY 1983, AT LEAST 60% OF THE COUNTRIES IN THE REGION WILL HAVE DEVELOPED AND/OR ADJUSTED THEIR TRAINING PROGRAMMES ON A TASK- AND COMMUNITY-ORIENTED BASIS, AS REFLECTED BY THE NUMBER OF PROGRAMMES WHICH HAVE BEEN DEVELOPED AND/OR CHANGED ACCORDINGLY.

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ACTIVITY: 2.2.1	DESIGN OF TASK-ORIENTED TRAINING PROGRAMMES, BASED ON THE ANALYSIS OF TASKS TO BE PERFORMED BY DEFINED CATEGORIES OF HEALTH WORKERS AND DESCRIPTION OF THE UTILIZATION OF SUCH WORKERS.				
	<ul style="list-style-type: none"> -Identification of minimum essential activities related to priorities (e.g. surveillance of prevalent diseases, basic reference laboratories, nutrition, environmental health, mother and child health). -Improvement of methodology for development of task-oriented training programs based on minimal essential activities. -Analysis of potential training resources at health services and related resources at educational institutions for improvement of in-service training. -Improvement of the teaching-learning process in priority disciplines for different health professions (e.g. Epidemiology, Maternal and Child Care, Health Services Administration, Social Sciences, Health Statistics, Environmental Health, etc.), based on task-oriented analysis and other pertinent strategies. 	<ul style="list-style-type: none"> -Comparison of main programs in the Region with task-oriented training programs. -Development of mechanisms for improvement of relevant areas of in-service training. 	<ul style="list-style-type: none"> -Analysis of activities in programs of extension of health coverage and recommended lines for improvement of training programs. -Revision of mechanisms to improve health actions at different levels and of the influence on the dynamic of services exerted by training based on process-objectives. 	<ul style="list-style-type: none"> -Strengthening training programs in selected institutions in view of innovative methodology developed in alternative health care delivery programs. 	<ul style="list-style-type: none"> -Development of strategies for continuing revision of teaching learning material using national and regional experiences.
<u>Output Indicators</u>	<ul style="list-style-type: none"> -Report on minimum activities related to priority areas. -Issuing of guideline for the utilization of process-objectives in the development of training programs. 	<ul style="list-style-type: none"> -Report on relationship of health and educational activities in selected case studies. 		<ul style="list-style-type: none"> -Guideline for improvement of task-oriented training programs. 	<ul style="list-style-type: none"> -Report on national and regional experiences and Report on strategies.
ACTIVITY: 2.2.2	ESTABLISHMENT OF CRITERIA AND GUIDELINES FOR PROGRAMME DEVELOPMENT ON A TASK -AND COMMUNITY- ORIENTED BASIS FOR ALL LEVELS OF HEALTH PERSONNEL AND SUPPORT FOR THEIR APPLICATION				
	<ul style="list-style-type: none"> -Development of strategies for the implementation of new dimensions in the role of nurses in the delivery of health care -Development of guidelines for the preparation of nurses in countries where the expansion of the role was officially accepted (e.g.: Central America, Caribbean, Colombia). -Cooperation with the schools of nursing in the development of the basic curriculum which includes the preparation of nurses for new extended functions. -Assistance to improve new training programs and strengthening of existing programs in Veterinary Medicine, Dentistry and Sanitary Engineering for different levels of personnel, based on task-oriented training. -Development of training programs in water supply and sewage. 				
<u>Output Indicators</u>	<ul style="list-style-type: none"> -Preliminary guidelines on expansion of the role of nurse. 	<ul style="list-style-type: none"> -Report on basic curriculum in nursing. 	<ul style="list-style-type: none"> -Regional seminar on the training in solid wastes disposal. -Report on training in solid wastes disposal. 	<ul style="list-style-type: none"> -Implementation of policies for the training in solid wastes disposal. -Number of countries adopting the expansion of nursing roles. 	<ul style="list-style-type: none"> -Interchange of experiences evaluation and issue of recommendations on training programs in water supply, sewage and solid wastes disposal. -Guidelines on the training in Veterinary Medicine. -Report on evaluation of training on environmental health.
ACTIVITY: 2.2.3	DEVELOPMENT OF TRAINING PROGRAMMES WHICH ARE SPECIALLY RELEVANT TO NEEDS OF UNDERSERVED POPULATIONS AND HAVE POTENTIAL FOR REPLICATION				
	<ul style="list-style-type: none"> -Identification of institutional experiences and needs for different health care levels in training technical and auxiliary personnel. -Development of strategies and guidelines for the design and implementation of Community Health oriented curricula in the schools of nursing and dentistry. -II Regional course for Instructors of Nursing Programs in Community Health. -Follow-up studies of compulsory rural service ("social service") for graduates in Medicine and Nursing and development of strategies to improve the effectiveness of such services. -Promotion of coordination among educational departments and health services in the supervision of Compulsory Rural Service. 	<ul style="list-style-type: none"> -Follow-up of experiences. -III Regional Course for Instructors of Nursing Programs in Community Health. 	<ul style="list-style-type: none"> -Follow-up of experiences. -Institutionalization at country level of the post-basic training of Nurses in Community Health and Primary Health Care. 	<ul style="list-style-type: none"> -Promotion of new task oriented training programs for technical and auxiliary personnel with emphasis on primary health care. -Promotion continuing. 	<ul style="list-style-type: none"> -Promotion continuing. -Development of models and general guidelines for a better utilization of compulsory services in rural areas.
<u>Output Indicators</u>		<ul style="list-style-type: none"> -Preliminary report on Community Health training for Nurses. 	<ul style="list-style-type: none"> -Issuing guidelines for training of technical and auxiliary personnel. 	<ul style="list-style-type: none"> -Reports on follow-up studies about compulsory rural services. -Issue revised guidelines for the preparation of Nurses in Primary Health Care. 	<ul style="list-style-type: none"> -Guidelines on new strategies and models for compulsory rural services.

SET 2.3: BY 1983, AT LEAST 50% OF THE COUNTRIES IN THE REGION WILL HAVE ESTABLISHED ADVANCED EDUCATION HEALTH PERSONNEL INCLUDING THE SUBJECT MATTER COMPONENT OF TEACHER TRAINING, AS REFLECTED BY THE INCREASE IN THE NUMBER OF SUPERVISORS AND EDUCATORS IN THE VARIOUS AREAS OF HEALTH WORK EFFECTIVELY TRAINED FOR THEIR SPECIFIC TASKS.

	1978	1979	1980	1981	1982	1983
ACTIVITY: 2.3.1	IDENTIFICATION OF REFERRAL AND SUPERVISORY SYSTEMS, AND OF TRAINING NEEDS FOR INSTRUCTION AND SUPERVISION OF DIFFERENT LEVELS OF HEALTH WORKERS, AND PROMOTION OF APPROPRIATE SYSTEMS					
Output Indicators	<ul style="list-style-type: none"> -Comparison of referral and supervisory systems and identification of training needs for instruction and supervision at different levels in selected groups and countries each year. -Improvement of teachers' and tutor's training programs in different health professions (medicine, nursing, dentistry). -Review of specific needs for teachers' and tutors' training in specific programs. 	<ul style="list-style-type: none"> -Development of studies on referral and supervision methods applied to different categories of personnel. Development of appropriate systems. 		<ul style="list-style-type: none"> -Analysis of evaluation methods applied for supervision and referral in terms of utilization of services by the community and its participation. 		<ul style="list-style-type: none"> -Review of needs and new training methods for supervision. -Evaluation of the degree of relationship of activities, training experience and priorities of the Region.
			<ul style="list-style-type: none"> -Issue of comparative description of supervision and referral systems. -Collection of bibliography information related to developed programs and material in training supervisors. 	<ul style="list-style-type: none"> -Report of evaluation methods on referral and supervisory system regarding training programs. 		<ul style="list-style-type: none"> -Report on strategies and recommendations for training supervisors.
ACTIVITY: 2.3.2	EVALUATION, FOLLOW-UP AND IMPROVEMENT OF POSTGRADUATE, POSTBASIC TRAINING, PARTICULARLY IN PUBLIC HEALTH AND COMMUNITY HEALTH					
Output Indicators	<ul style="list-style-type: none"> -Continue collaboration with Non Governmental Organizations (NGO), (e.g. Asociación Latinoamericana de Escuelas de Salud Pública (ALAESP), Federación Panamericana de Asociaciones de Facultades y Escuelas de Medicina (FEPAFEM), and Unión de Universidades Latinoamericanas (UDUAL), World Federation for Medical Education, etc.). X Conference of ALAESP -Follow up of Latin American experience with teaching of Public Health, Preventive and Social Medicine, Community-oriented Curriculum and recent approaches of in-service training in regionalized health service areas for all professions (e.g. medicine, nursing, veterinary, dentistry, environmental health, etc.). -Continue cooperation with Schools of Public Health and postgraduate courses in Preventive and Social Medicine. -Establishment of preliminary approach for better utilization of different institutions regarding training programs through PAHO/WHO Fellowships program. 	<ul style="list-style-type: none"> -Interchange of teaching-personnel, material, and experiences among postgraduate courses in Social Medicine. -Implementation of Coordinated schemes of training for selected candidates in Fellowships program. 	<ul style="list-style-type: none"> XI Conference of ALAESP -Expansion of the coordination with institutions in the Region in advanced international public health. 	<ul style="list-style-type: none"> -Evaluation of coordinated advanced training in international public health. Study and development of strategies for expansion to include other regions. 	<ul style="list-style-type: none"> XII Conference of ALAESP -Implementation of coordinated training in advanced international public health with institutions in other regions. 	<ul style="list-style-type: none"> -Evaluation and recommendations for improvement of training programs coordinated with PAHO/WHO Fellowships.
		<ul style="list-style-type: none"> -Report on more advanced experiences in Social and Preventive Medicine. -Report on acceptance of coordinated schemes of training. 	<ul style="list-style-type: none"> -Report on Workshop on post-graduation experience in Social and Preventive Medicine. 		<ul style="list-style-type: none"> -Report on effectiveness and efficiency of postgraduated courses in Social and Preventive Medicine. 	<ul style="list-style-type: none"> -Report on the utilization of different patterns of training in Fellowships.
ACTIVITY: 2.3.3	CONTINUOUS REVIEW AND IMPROVEMENT OF THE ADMINISTRATION OF THE FELLOWSHIP PROGRAMME AND NATIONAL POSGRADUATE/POSTBASIC PROGRAMMES					
Output Indicators	<ul style="list-style-type: none"> -Continue administrative processing of PAHO / WHO Fellowships program. -Issue Directory of Training Programs in the Health Fields in Latin America and the Caribbean. -Decentralization training seminars and visits as required*. * Details to be determined depending upon results of current study. 	<ul style="list-style-type: none"> -Review directory of training programs and redesign for special information based on countries needs and continued updating. 	<ul style="list-style-type: none"> -Improve information on training resources and continue updating. 		<ul style="list-style-type: none"> -Refinement of information systems on training resources in countries of the Region. 	
		<ul style="list-style-type: none"> -Distribution of 	<ul style="list-style-type: none"> -R e p o r t o n F e l l o w s h i p s 		<ul style="list-style-type: none"> -Redistribution of 	<ul style="list-style-type: none"> -a c t i v i t i e s

TARGET 3.1: BY 1983, AT LEAST 50% OF THE COUNTRIES IN THE REGION WILL HAVE DEVELOPED A SYSTEMATIC APPROACH TO EDUCATIONAL PLANNING AND TECHNOLOGY, INCLUDING TEACHER-TRAINING, AS MEASURED BY IMPROVED PERFORMANCE AND APPROPRIATENESS OF TRAINING PROGRAMMES.

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ACTIVITY:	1978	1979	1980	1981	1982	1983
3.1.1	IDENTIFICATION AND ASSESMENT OF, AND SUPPORT TO, APPROPRIATE EDUCATIONAL SYSTEMS, METHODOLOGICAL APPROACHES, EVALUATION SCHEMES AND RELATED TECHNOLOGIES TO FOSTER DEVELOPMENT OF TRAINING OF HEALTH PERSONNEL					
	<u>Central Coordination - Technical Adviser Services, Supervision and Evaluation to Appropriate Educational Systems, Methodological Approaches, Evaluation and Technologies in Health Education</u>					
	<ul style="list-style-type: none"> -Diagnosis of requirement of new educational methodologies in schools and training programs, basically on the mid and auxiliary levels. -Development of an evaluation plan for institutions (tech and aux. personnel). -Coordination meeting NIDES/CLATES. 	<ul style="list-style-type: none"> -Development of standards, criterias and alternate plans for incorporating this educational methodology. -Meeting of latinamerican specialists concerning these standards, criterias, etc. -Meeting of specialists in evaluation -Coordination Meeting NIDES/CLATES. 	<ul style="list-style-type: none"> -Promotion of these alternate plans in five countries of the Region each year. -Meeting of specialists in subregion for local adaptation of alternate plans (2 each year). -Directed advisory services through NIDES and CLATES. -Evaluation of training institutions and programs. -Meeting of specialists by subregion (2 each year). -Coordination Meeting NIDES/CLATES. 			<ul style="list-style-type: none"> -Directed advisory services through NIDES and CLATES. -Evaluation of training institutions and programs. -Meeting of specialists -Coordination meeting NIDES/CLATES.
Output Indicators	<ul style="list-style-type: none"> -Diagnosis of situation -Outline of evaluation -Coordination meeting number 	<ul style="list-style-type: none"> -Meeting of specialists in standards -Meeting of specialists in evaluation -Coordination meeting -Development of standards 	<ul style="list-style-type: none"> -Promotion and adaptation meetings -Advisory services -Evaluation of institutions and programs -Coordination Meeting 	<ul style="list-style-type: none"> -Continue -Continue -Continue 	<ul style="list-style-type: none"> -Continue -Continue -Continue 	<ul style="list-style-type: none"> -Evaluation Report.
3.1.2	IMPROVEMENT OF REGIONAL AND NATIONAL CAPABILITIES FOR RESEARCH AND DEVELOPMENT ON EDUCATION OF HEALTH MANPOWER					
	<u>Operation of the Latinamerican Centers of Educational Technology for Health in Rio (CLATES-Rio) and Mexico (CLATES-México)</u>					
	<ul style="list-style-type: none"> -Development of the educational technology component of the NIDES of PLADES to serve as local national group -10 NIDES -Development of Nursing Educational Technology subcenters. -15 subcenters in the countries. -Development of educational innovations in dentistry program (network) subcenters in the countries to improve learning process, production material and use appropriate technology for training mid and auxiliary personnel. -Development of network in environmental health (education, information and technological programs) selection each year 2 	<ul style="list-style-type: none"> -12 NIDES -20 subcenters in the countries. 	<ul style="list-style-type: none"> 15 NIDES -Implementation of new subcenters of Nursing educational technology in the countries 	<ul style="list-style-type: none"> -Implementation of new NIDES in the PLADES (see HRD) -Promotion in the countries to continued the program. 	<ul style="list-style-type: none"> -Promotion in the countries to continued dentistry innovation program. -Promotion in the countries to continued dentistry innovation program. 	<ul style="list-style-type: none"> -Evaluation of the network in Medicine, Nursing, Dentistry and Sanitary Engineering
Output Indicators	<ul style="list-style-type: none"> -Activities and subcenters numbers. 	<ul style="list-style-type: none"> -Implementation new NIDES, Nursing, Dentistry and Environmental Health subcenters 	<ul style="list-style-type: none"> -Continue 	<ul style="list-style-type: none"> -Promotion of the network in the countries 	<ul style="list-style-type: none"> -Continue 	<ul style="list-style-type: none"> -Evaluation of the Network in Medicine, Nursing, Dentistry and Environmental Health.
3.1.3	DEVELOPMENT OF TEACHER-TRAINING PROGRAMMES AT REGIONAL AND/OR NATIONAL LEVEL					
	<u>Development of the Latin American Centers of Educational Technology for Health in Rio (CLATES-Rio) and Mexico (CLATES-México) for Priority Areas and Mostly Technical and Auxiliary Personnel</u>					
	<ul style="list-style-type: none"> -Courses in CLATES-Rio and CLATES-México for training professors and instructors in educational technology basically for training programs for technical and auxiliary personnel -20 courses each CLATES. -Development of local courses advisory services by CLATES. -Training teachers in Environmental engineering. -Development of large scale training system (L.S.T.S.) in CLATES. 	<ul style="list-style-type: none"> -20 courses each CLATES. -Development of local courses -Training teachers in Environmental Engineering. -Programming of L.S.T.S. in priority areas. -Local adaptation of L.S.T.S. in central america countries. 	<ul style="list-style-type: none"> -20 courses each CLATES. -Development of local courses. -Training of teachers in Environmental Engineering. -Implementation of the L.S.T.S. in priority areas. -Local adaptation of L.S.T.S. in Andean Pact and Mexico. 	<ul style="list-style-type: none"> -20 courses each CLATES -Continued local courses. -Continued training environmental health. -Local adaptation of L.S.T.S. in priority areas. -Local adaptation of L.S.T.S. in Argentina, Chile, Paraguay, Uruguay, Dominican Republic, Caribbean. 	<ul style="list-style-type: none"> -20 courses each CLATES. -Continued local courses -Continued training Environmental health. -Local operation in the countries of L.S.T.S. 	<ul style="list-style-type: none"> -20 courses each CLATES. -Evaluation of CLATES and local courses. -Local operation in the countries of L.S.T.S. -Evaluation L.S.T.S.
Output Indicators	<ul style="list-style-type: none"> -CLATES/Country courses and 	<ul style="list-style-type: none"> -CLATES/Country courses and 	<ul style="list-style-type: none"> -CLATES/Country courses and 	<ul style="list-style-type: none"> -Continue 	<ul style="list-style-type: none"> -Continue 	<ul style="list-style-type: none"> -Evaluation of CLATES and country courses.

SET 3.2: BY 1983, AT LEAST 75% OF THE COUNTRIES IN THE REGION WILL BE DEVELOPING AND/OR PROVIDING RELEVANT HEALTH INSTRUCTIONAL MATERIAL, INCLUDING TEXTBOOKS, REFLECTED BY THE INCREASE IN STUDENT UTILIZATION OF THE SAME AND A CLEAR FEEDBACK ON EFFECTIVENESS.

1978

1979

1980

1981

1982

1983

ACTIVITY: 3.2.1 SURVEY AND ASSESSMENT OF EXISTING LEARNING MATERIALS. IDENTIFICATION OF PRIORITY REQUIREMENTS FOR NEW LEARNING MATERIALS FOR ALL CATEGORIES OF PERSONNEL, AND INVESTIGATION OF DESIGN AND REPRODUCTION FACILITIES

Central Coordination - Technical Adviser Services, Supervision and Evaluation for new Learning Materials for all Categories of Personnel

	<ul style="list-style-type: none"> -Survey on program for extending coverage and personnel and personnel and instructional materials needs for their formation, identification of local groups, analysis of functions, etc. -Development of standards and criterias for the production and use of instructional materials. -Interdivisional working group. 	<ul style="list-style-type: none"> -Meeting with specialists from Andean Pact and Central America on local application of materials. -Development of a method for evaluating this program. 	<ul style="list-style-type: none"> -Meeting with specialists on local application of Brasil, Mexico, Cuba and Dominican Republic. -Beginning of continuing evaluation program. -Interdivisional working group. 	<ul style="list-style-type: none"> -Meeting with specialists from Argentina, Chile, Uruguay and Paraguay on local application of materials. -Implementation of the evaluation. -Interdivisional working group. 	<ul style="list-style-type: none"> -Continued -Interdivisional working group 	<ul style="list-style-type: none"> -Final evaluation of the period. -Meeting for Final evaluation. -Interdivisional working group
<u>Output Indicators</u>	<ul style="list-style-type: none"> -Survey report -Standards and criterias production. -Meeting of specialists. -Interdivisional Meeting. 	<ul style="list-style-type: none"> -Survey Report -Meeting of specialists for local adaptation. -Outline evaluation program. -Interdivisional meeting. 	<ul style="list-style-type: none"> -Meeting of specialists for local adaptation. -Application outline evaluation. 	<ul style="list-style-type: none"> -Holding of regional evaluation meetings. -Holding of interdivisional meetings. 	<ul style="list-style-type: none"> -Carrying-out permanent evaluation. -Holding of interdivisional meetings. 	<ul style="list-style-type: none"> -Evaluation at the end of period and regional evaluation meeting.

ACTIVITY: 3.2.2 DEVELOPMENT OR ADAPTATION OF MULTI-MEDIA INSTRUCTIONAL PACKAGES WITH EMPHASIS ON PRIORITY AREAS AND ON SELF-INSTRUCTIONAL APPROACHES

	<ul style="list-style-type: none"> -CLATES production of instructional materials as a matrix for large scale training system (L.S.T.S.) and their local adaptation. -Development of national group for local adaptation of instructional material and new contents. -CLATES advisory services for national groups. -Preparation of modules and instructional materials in different areas: Maternal child (Costa Rica), Community Health Nursing (Chile), Adult Nursing (Ecuador) -Coordination Meeting national group/CLATES. 	<ul style="list-style-type: none"> -Continue development local group. -Continued advisory services Meeting national group/CLATES. 	<ul style="list-style-type: none"> -Continue local adaptation for national groups. -Continue advisory services of CLATES. -Meeting national group/CLATES. 	<ul style="list-style-type: none"> -Continue local adaptation for national groups. -Continue advisory services of CLATES. -Coordination meeting national groups/CLATES. -Test of Nursing materials. 	<ul style="list-style-type: none"> -Local production of instructional materials. -Continue advisory by CLATES. -Coordination Meeting. -Establishment of a bank of instructional materials in Nursing and adaptation local of the modules. 	<ul style="list-style-type: none"> -Local production -Evaluation, coordination meeting national group/CLATES. -Evaluation specific instructional program.
<u>Output Indicators</u>	<ul style="list-style-type: none"> -National groups numbers. -Advisory services for CLATES -Coordination meeting -Modules and Matrix number. 	<ul style="list-style-type: none"> -Modules and Matrix numbers. -Local adaptation of instructional material and new content by national groups. -Advisory services to national groups. -Coordination meetings. 	<ul style="list-style-type: none"> -Local adaptation of instructional material and new content by national groups. -Advisory services to national groups. -Coordination meetings. 	<ul style="list-style-type: none"> -Local adaptation of instructional material and new content by national groups. -Advisory services to national groups. -Coordination meetings. 	<ul style="list-style-type: none"> -Local adaptation of instructional material and new content by national groups. -Advisory services to national groups. -Coordination meetings. 	<ul style="list-style-type: none"> -Local adaptation of instructional material and new content by national groups -Advisory services to national groups. -Coordination meetings.

ACTIVITY: 3.2.3 SELECTION, PRODUCTION, PROMOTION AND PROVISION OF LEARNING MATERIALS GROUPS WITH EMPHASIS ON PRIORITY AREAS

	<ul style="list-style-type: none"> -5 Selection committees for textbooks and/or manuals. -Production and sale of 7 books and/or manuals in priority areas. -Production and sale of 25 audiovisual aids and other instructional material. -Providing instructional equipment for groups and individual use (40 schools) 	<ul style="list-style-type: none"> -4 Selection committees for textbooks and/or manuals. -Production and sale of 14 books and/or manuals in priority areas. -Production and sale of 50 audiovisual aids and other instructional material. -Providing instructional equipment for groups and individual use (40 schools) 	<ul style="list-style-type: none"> -3 Selection committees for textbooks and/or manuals. -Production and sale of 12 books and/or manuals in priority areas. -Production and sale of 75 audiovisual aids and other instructional material. -Providing instructional equipment for groups and individual use 	<ul style="list-style-type: none"> -3 Selection committees for textbooks and/or manuals. -Production and sale of 8 books and/or manuals in priority areas. -Production and sale of 50 audiovisual aids and other instructional material. -Providing equipment continued. 	<ul style="list-style-type: none"> -3 Selection committees for textbooks and/or manuals. -Production and sale of 8 books and/or manuals in priority areas. -Production and sale of 50 audiovisual aids and other instructional material. -Providing equipment continued. 	<ul style="list-style-type: none"> -1 Selection committee for textbooks and/or manuals. -Production and sale of 8 books and/or manuals in priority areas. -Production and sale of 25 audiovisual aids and other instructional material. -Providing equipment continued.
<u>Output Indicators</u>	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees. -Production of books in priority areas. 	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees -Production of books in priority areas 	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees -Production of books in priority areas 	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees -Production of books in priority areas 	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees -Production of books in priority areas 	<ul style="list-style-type: none"> -Reports of selection committees. -Meetings of committees -Production of books in priority areas

TARGET 3.3: BY 1983, AT LEAST 60% OF THE COUNTRIES IN THE REGION WILL HAVE DEVELOPED A SCIENTIFIC AND TECHNOLOGICAL DOCUMENTATION SYSTEM AND WILL BE DISTRIBUTING SELECTIVE INFORMATION AS EVIDENCED BY A BROADER AND INCREASED UTILIZATION OF BIBLIOGRAPHIC INFORMATION.

1978

1979

1980

1981

1982

1983

ACTIVITY:	1978	1979	1980	1981	1982	1983
3.3.1	DEVELOPMENT OF CRITERIA AND SUBSEQUENT IMPLEMENTATION OF A REGIONAL NETWORK OF SCIENTIFIC AND TECHNOLOGICAL INFORMATION					
	<u>Central Coordination - Technical Adviser Services, Supervisor and Evaluation of Network of Scientific and Technological Information</u>					
	<ul style="list-style-type: none"> -Development of plan for evaluating impact of network. -Evaluation of CNID in operation. -Development of standard and criteria for operation network and CNID. -Meeting of specialists in standards. -Coordination meeting CNID/BIREME. 	<ul style="list-style-type: none"> -Meeting on evaluation outline CNID/BIREME. -Operation 10 CNID in countries. -Introduction of new 4 CNID. -Coordination meeting CNID/BIREME. 	<ul style="list-style-type: none"> -Implementation continuing evaluation of network CNID/BIREME. -Operation 14 CNID in countries. -Introduction of new 4 CNID. -Coordination Meeting CNID/BIREME. 	<ul style="list-style-type: none"> -Continue with continuing evaluation of network CNID/BIREME. -Operation and support 10 countries for 18 CNID. -Coordination meeting CNID/BIREME 		<ul style="list-style-type: none"> -Results of final evaluation of period. -Coordination meeting CNID/BIREME. Evaluation. -Operation 18 CNID
Output Indicators	<ul style="list-style-type: none"> -CNID evaluation. -Standard implemented. -Evaluation scheme -Coordination meeting. 	<ul style="list-style-type: none"> -Evaluation meeting. -Number of CNID in operation -Coordination meeting 	<ul style="list-style-type: none"> -First evaluation network. -Number of CNID in operation. -Coordination meeting. 	<ul style="list-style-type: none"> -Number CNID in operation. -Coordination meeting. 	<ul style="list-style-type: none"> -Number CNID in operation. -Coordination meeting. 	<ul style="list-style-type: none"> -Final evaluation. -Coordination meeting. -CNID operation.
3.3.2	COLLECTION, ANALYSIS AND DISSEMINATION OF SELECTIVE INFORMATION IN PRIORITY AREAS RELATED TO HEALTH					
	<u>Development of BIREME Compilation, Analysis and Dissemination of Selective Information, Training Librarians, Medline, Support for CNID</u>					
	<ul style="list-style-type: none"> -Study for introducing MEDLINE in Latin America. -Selective dissemination of information in health services. (begin) -Selective dissemination of information regarding maternal and child aspect and nutrition. -Meeting BIREME/S.A.C. 	<ul style="list-style-type: none"> -Meeting countries/financial backers for establishment of MEDLINE Latin America. -SDI in health services. -SDI in maternal/child and nutrition. -SDI in communicable disease -SDI in environmental health -Meeting BIREME/S.A.C. 	<ul style="list-style-type: none"> -Introduction of MEDLINE system in Latin America. -Continued SDI in 4 priority areas. -Meeting BIREME/S.A.C. -Interdivisional working group for selecting material to be disseminated. 	<ul style="list-style-type: none"> -Operation of MEDLINE in Latin America countries and continuing evaluation. -Continue SDI in 4 priority areas. -Meeting BIREME/S.A.C. -Meeting BIREME/S.A.C. 		<ul style="list-style-type: none"> -Evaluation of MEDLINE in Latin American countries -Continued SDI in 4 priority areas. Evaluation. -Meeting BIREME/S.A.C.
Output Indicators	<ul style="list-style-type: none"> -BIREME operation reports -Number of courses -Volume of dissemination -Report of Advisory Committee. 	<ul style="list-style-type: none"> -BIREME operation reports -Number of courses -Volume of dissemination -Report of Advisory Committee. -Study MEDLINE report. 	<ul style="list-style-type: none"> -BIREME operation reports -Number of courses -Volume of dissemination -Report of Advisory Committee. -MEDLINE feasibility study. 	<ul style="list-style-type: none"> -BIREME operation reports. -Number of courses -Volume of dissemination -Report of Advisory Committee. -Countries linked to MEDLINE 	<ul style="list-style-type: none"> -BIREME operation reports. -Number of courses -Volume of dissemination -Report of Advisory Committee. 	<ul style="list-style-type: none"> -BIREME operation reports. -Number of courses -Volume of dissemination. -Report of Advisory Committee. -BIREME-evaluation report
3.3.3	ESTABLISHMENT OF HMD INFORMATION SERVICES ON HEALTH MANPOWER DEVELOPMENT PROGRAMMES AND PROCESSES					
	<ul style="list-style-type: none"> -Identification of relevant information on strategies, programmes, methodologies, and organization structure, that could benefit educational training institution. -Planning of a systematic mechanism for collection and dissemination of information on HMD. -Publication in a quarterly basis of "Educación Médica y Salud" as a major resource for dissemination of selected information 					
Output Indicators	<ul style="list-style-type: none"> -Plan for information on HMD. -I s s u e s o f "E d u c a c i ó n M é d i c a y S a l u d" 					

B U D G E T P R O P O S A L S

MANPOWER PLANNING AND ADMINISTRATION (HRP)

TARGET 1.1 EFFECTIVE COORDINATION BETWEEN EDUCATIONAL AND SERVICE INSTITUTIONS

This activity will encompass and regroup several conferences, studies, meetings, task forces, that may stimulate the establishment or strengthening of manpower development relations with other sectors - health services, labor, education, regional development, etc. Specific cooperation is sought with AAMC, OECD, FAO, UNESCO, ILO, and other United Nations specialized agencies.

Technical financial support will be provided to national groups undertaking studies on alternative schemes of coordination between health services and manpower development.

This activity will be developed in close coordination with activity 2.1.4 (Latin American Program for Educational Development and Health - PLADES) and will receive technical inputs from activities 1.2.3, 1.4.1, 1.4.3.

- a) at the institutional level - the PLADES programs will support joint committees in the country, between health services institutions or teaching institutions. These committees will promote integrated teaching, integrated health care delivery, and integrated research. Committees established at the national level may decentralize in several state or provincial committees with multiplying effect.
- b) at the planning level - teaching institutions will be prepared to participate in the health manpower planning national process. Conversely, the manpower units of the Ministries of Health will be prepared to fully utilize the participation of teaching institutions in the planning process.

	1978	1979	1980	1981	1982	1983
Short-term consultants	12,000	15,000	16,750	18,000	18,250	10,500
Participants	-	9,000	30,000	-	-	-
Seminar costs	-	3,000	1,500	4,000	4,000	-
Grants	3,000	12,000	12,000	12,000	12,000	12,000
Editing/Printing	-	1,500	-	1,500	1,500	-
Total	20,000	40,500	60,250	35,500	35,750	22,500

MANPOWER PLANNING AND ADMINISTRATION (HRP)

TARGET 1.2 DEVELOPMENT OF HEALTH MANPOWER PLANNING PROCESSES

The required manpower planning methodology will be developed by a series of annual workshops on technical issues. Each workshop will be followed by the preparation and distribution of technical guidelines.

Similarly, methods will be developed for the analysis and estimation of requirements of personnel for the priority areas - maternal and child health and nutrition, family health, control of communicable diseases, laboratory, water supply and sewage, basic sanitation, occupational health and other activities. Staffing guidelines will be prepared in 1979, and field applications will take place in 1980, 1981, and 1982.

Technical cooperation with the manpower departments or divisions of the Ministries of Health, will be continued. The technical cooperation will be centered on a sequence of technical aspects to meet the needs of the countries in manpower information to reach a manpower planning stage - strengthening of the national units; constitution of a manpower information system and information collection, retrieval and processing; determination of manpower requirements, manpower policy analysis, setting of manpower standards and finally health manpower planning. This activity will be implemented through mutual advisory services and a series of subregional seminars on theoretical aspects of health manpower planning leading to a Regional Conference in 1983.

Activities 1.2.2 and 1.2.3 will require the preparation of specialized staff in several areas of manpower planning - information systems, computation, health manpower economics, manpower legislation, labor organization, policy analysis and formulation, and educational planning. This activity will be implemented through a training program of short basic courses, complemented by specialized training sessions and occasional academic training.

	1978	1979	1980	1981	1982	1983
Short-term consultants	43,250	63,500	56,000	65,950	57,750	54,000
Participants	5,000	7,000	10,000	10,000	10,000	-
Seminar Costs	9,500	10,000	8,000	8,000	-	70,000
Grants	5,000	6,000	10,000	10,000	10,000	4,000
Fellowships	18,000	25,000	19,000	20,000	15,000	7,000
Editing/Printing	-	3,000	5,000	1,000	1,000	10,000
Computation	6,000	8,000	-	500	1,000	1,000
Local Costs	7,000	9,500	-	1,000	1,500	22,000
Total	88,750	132,000	108,000	116,450	96,250	168,000

MANPOWER PLANNING AND ADMINISTRATION (HRP)

TARGET 1.3 DEVELOPMENT OF MANAGEMENT TRAINING CAPABILITY

The evaluation, coordination and support of the whole network of the 47 existing training centers and academic courses, to ensure a holistic regional approach to policy decisions, planning and implementation of the education and training of the administrative manpower required at the different levels of care for the extension of coverage, will be implemented through intercountry workshops, task forces, fellowships for exchange, specialization and development of faculty staff.

Supportive mechanisms such as periodic directory of training programs, faculty teaching material, and research will be developed. In cooperation with HRT, a clearinghouse of instructional material will be established, educational technology and materials will be developed through the textbook program and strengthening of libraries, through a Research Reference Catalogue and the periodical publication of "Program Notes on Health Care Administration Education".

Guidance and support will be provided for the establishment and operation of Advanced Training Centers in Health Care Administration for advanced studies and preparation of professors, and as advanced research centers(*). This will be implemented through a survey of training institutions in health sciences, management sciences, and of health services, to identify the host institutions for the Centers. Proposals for the creation of 5 centers will be made in 1978 and 1979. Detailed plans of operation will be prepared and technical support will be given for the operation of the centers in subsequent years.

Strengthening of the inter-relations between training of manpower in health care administration, and the utilization of this manpower in the service institution at different levels of care for the extension of coverage. This will be implemented through: promotion, coordination and support of intensive training programs for the development of managerial skills, workshops for in-service training of teachers, continuing education for managers at the several levels of care, independent study programs, and the development of new models of health care delivery systems.

(*) The main financing of this activity is established by a Memorandum of Agreement between the PAHO and the W.K. Kellogg Foundation, which earmarks an average funding of \$500,000 for the direct support of each center.

	1978	1979	1980	1981	1982	1983
Short-term Consultants	54,000	52,750	64,500	62,750	68,750	46,000
Participants	60,000	111,500	96,900	106,500	95,750	100,500
Contractual Services	4,000	4,000	4,000	4,000	4,000	4,000
Editing/Printing	19,000	25,500	25,500	25,500	25,500	25,500
Educational Materials	5,000	2,000	2,000	2,000	2,000	2,000
Secretarial Services	-	4,000	4,000	4,000	4,000	4,000
Total	142,000	199,750	196,900	204,750	200,000	182,000

MANPOWER PLANNING AND ADMINISTRATION (HRP)

TARGET 1.4 ESTABLISHMENT OF SCHEMES OF CAREER DEVELOPMENT AND CONTINUING EDUCATION

- A regional study of the existing patterns of career development in Latin America and the Caribbean will permit the preparation of alternative systems of continuing education (activity 1.4.2), scheme for monitoring the utilization of health personnel (activity 1.4.3), and the development of strategies to control internal or external migrations of health personnel (activity 1.5.2). Once the regional study is completed, guidelines will be prepared for the design of career ladders and lattices. Technical cooperation will be developed between the countries in 1982-1983.
- The development of procedures to implement alternative systems of continuing education will be implemented through three lines of action:
 1. Technical cooperation between existing programs for their progressive interprofessional coordination, synchronization, extension, and integration in the overall manpower development for the extension of coverage.
 2. A Regional Program will establish a permanent system of continuing education for all categories of health personnel in direct coordination with programs of extension of coverage in 16 countries of Latin America and the Caribbean.
 3. The development of programs of continuing education in priority areas - maternal and child health and nutrition/family health, disease control, and environmental health.

Technical cooperation will be established and progressively expanded between the Ministry of Health in two related areas: manpower expenditures - manpower economics and manpower management, giving priority attention to the situation in rural areas and peripheral services.

The scientific and practical production of this activity will be utilized in activities 1.3.1, 1.3.2, 1.3.3, 1.3.4, and will lead to the development of schemes for the monitoring of the utilization of health personnel.

	1978	1979	1980	1981	1982	1983
Short-term consultants	19,250	51,000	83,200	87,550	105,815	112,500
Participants	-	-	8,000	-	-	-
Grants	88,000	188,000	363,000	397,000	251,006	148,000
Seminar costs	8,000	18,000	22,000	15,000	16,000	12,000
Educational material and equipment	-	16,000	4,500	11,000	4,000	-
Contractual services	9,000	10,000	6,000	5,000	-	8,000
Editing, translation, and printing	-	2,000	3,200	3,500	-	-
Local costs	-	3,000	-	-	3,000	-
Total	124,250	288,000	467,900	519,050	379,815	280,500

MANPOWER PLANNING AND ADMINISTRATION (HRP)

TARGET 1.5 DISCOURAGEMENT OF UNDESIRABLE MIGRATION

A study on certification procedures and mutual recognition of qualifications and diplomas will be carried out under extrabudgetary resources during the period 1979-1982. Special attention will be given to recognition of diplomas within Latin America and within the Caribbean area.

Upon request of governments, the Organization will establish technical cooperation for the study of the migration phenomena, their interpretation and control strategies. Consideration will also be given to the consequences of abrupt discrimination of migration and the emergence of new poles of attraction.

	1978	1979	1980	1981	1982	1983
Short-term consultants	9,000	15,500	14,500	15,500	16,400	8,500
Contractual services	-	10,000	-	8,000	-	-
Editing, translation and printing	-	-	-	-	1,500	-
Total	9,000	25,500	14,500	23,500	17,900	8,500

HUMAN RESOURCES DEVELOPMENT (HRD)

TARGET 2.1 INSTITUTIONAL DEVELOPMENT

Updating information on educational institutions and programs for the production of respective Directories, several educational institutions in the Region have pursued important structural changes looking for innovative approaches in organization and programs. During 1978-1983 attention will be given to the follow-up of these experiences and the design of revision schemes in special settings where a better integration with health services could be envisaged. The follow-up referred above aims to a special publication of those experiences during 1979 and 1981. A meeting was held in Mexico during 1977 and will be followed by a detailed review in the creation or transformation of selected institutions. This will be analyzed during 1979 to 1981, in the following countries: Costa Rica, Cuba, Guatemala, Honduras, Mexico, and Dominican Republic.

During the period of 1975-1977, activities have been developed taking in consideration the special need for a better organization in the training programs of technical and auxiliary personnel. The main problems, as well as experiences throughout the Region were analyzed in a workshop held in 1976. The experience of the work in the Region, through selected countries, will be followed during 1978 and 1979 more directly with programs in Central America, Cuba, and Mexico; followed during the next two years by the Andean countries and Brazil. Later, a comparison of patterns used in these programs will take place, considering the strategies for multiprofessional team development.

The activities planned for the period 1978-1983 for the training of auxiliary nurses comprise: (a) development in each country of the Region of a plan and the necessary mechanisms for the training of auxiliary nursing personnel; (b) development and/or strengthening of mechanisms for the preparation of instructors; (c) preparation of guidelines, and educational material for the training of auxiliary nursing personnel. The activities are focused on the experimentation of new models and techniques for the training of rural health auxiliaries in nursing, based on problem solving and interaction auxiliary/community and include the preparation of teachers, the production of modules and autoinstructional material in eight selected countries of the Region.

The Latin American Program of Educational Development in Health (PLADES), has been implemented since 1976. It represents an interesting experiment of technical cooperation in health manpower development through national groups of coordination between health services and educational institutions. Funds have been provided through a grant from W.K. Kellogg Foundation to PAHEF, and this is complemented by PAHO regular funding and by national allocations to each specific country project in: Brazil, Bolivia, Costa Rica, Ecuador, Honduras, Mexico, Nicaragua, Peru, Dominican Republic, and Venezuela. During 1978, especial attention will be given to mechanisms of coordination developed in each country involved. Additional groups will be added to the initial ones during the coming years, as well as the expansion to subgroups at national level.

BUDGET	1978	1979	1980	1981	1982	1983
STC	115,000	133,000	151,000	136,000	184,000	161,000
Seminar Costs	54,000	45,000	50,000	75,000	55,000	70,000
Grants	228,000	180,000	90,000	60,000	60,000	30,000
Supp. and Equip.	50,000	92,000	60,000	75,000	75,000	105,000
Coordination	91,502	80,000	90,000	50,000	50,000	50,000
TOTAL	538,502	530,000	441,000	396,000	424,000	416,000

TARGET 2.2 TASK-ORIENTED TRAINING PROGRAMS

For the extension of health coverage it will be of importance to have a clear identification of essential activities related to health priorities in primary care, to be performed by technical and auxiliary personnel. Two consultants will collaborate in the visits to institutions and a small working group will prepare a preliminary report. To some extent the strategy of cooperation with national coordination groups mentioned in HRD 2.1.4 will be used for these activities related to training of health personnel at all levels.

For a better coordination and, in some cases, integration of services and training activities, in each country, there is a need for detailed study of existing training resources and the identification of potential and actual services, or actions in the services institutions, for the formulation of sequential training activities. Each year, and at selected countries, these aspects will be analyzed and written down as guidelines for the programs' development.

The major objective of the activities outlined in HRD 2.2.2 is to cooperate with countries that officially accept the expansion of the role of nurses (Central America, Caribbean Region, Colombia, and Panama) in the development of educational programs which enable nurses to function in an expanded role in primary health care and to measure the impact of these programs on the extension of health coverage. Plans to reach this objective include: revision of existing courses, establishment of new ones and reformulation of the basic curriculum so as to incorporate the knowledge and experience required for the enlargement of the nursing functions.

Guidelines, design of modular curriculum, instructional materials, and results of studies carried out by the above-mentioned countries will be issued and made available to interested countries.

It is estimated that about 25,000 people work at all levels (including managerial, professional, clerical and laboral), in the field of water supply and sewerage in Latin America and in the Caribbean Area. National training programs for the sector, instituted within the responsible national water and sewerage agencies of the countries, are to be strongly encouraged and supported.

Assistance will also be provided to programs in veterinary medicine and dentistry.

The Expert Committee on Teaching of Community Health Nursing, held in Washington, D.C. in 1976, made several recommendations related to changes that must be introduced in the basic nursing curriculum if a community oriented nurse is to be prepared. The group of activities outlined has as its objectives to develop and make available to countries strategies, tools, and instruments which may facilitate the introduction of desired changes in the preparation of nurses.

	1978	1979	1980	1981	1982	1983
Short-term consultants	86,000	91,000	100,000	116,000	120,000	125,000
Seminar Costs	75,000	90,000	96,000	96,000	85,000	75,000
Grants	36,000	48,000	52,000	62,000	65,000	65,000
Supply and equipment	30,000	30,000	55,000	65,000	65,000	40,000
Total	227,000	259,000	303,000	339,000	335,000	305,000

HUMAN RESOURCES DEVELOPMENT (HRD)

TARGET 2.3 POSTGRADUATE TRAINING

After 20 years of the introduction of Preventive Medicine, aspects in the teaching of medicine (Viña del Mar Seminar in Chile, 1955, and Tehuacán Seminar in Mexico, 1956), and also, analysis of the results in 1968 and in 1974, a wide range of experiments have been developed throughout Latin America (e.g., community medicine, family interview and follow-up, school health centers, etc.). Also, new approaches of in-service training in regionalized health services areas have developed. During recent years, few programs started with greater emphasis in Social Services and postgraduate courses, but there is a need of interchange of these experiences. The follow-up of these experiences will continue through the period 1978 to 1983.

The spread of useful knowledge by faster and efficient schemes includes the necessary improvement on supervision and referral systems.

In the field of Education in Public Health, the schools of public health and other postgraduate programs in Preventive Medicine are providing important training in the Region. Through the Latin American Association of Schools of Public Health and other associations for different professions, the Organization will keep support to discussion and recommendations on the main innovative aspects of training and education.

In cooperation with Fellowships (HRF), a new scheme for coordinating the programs of two or more institutions to accomplish specific training objectives will be developed, to deal with different public health fields. According with availability of funds, special fellowships could be awarded for international public health training. Past experiences derived from "Institutional Fellowships" program will be used for this purpose.

Expertise and information on training resources gained through the fellowship program will be increasingly placed at the disposal of governments for support of health-related training activities financed from other sources as well as from the Organization's funds. Assistance will be provided in development of new approaches to training (see HRD Target 2.3.2). Decentralization will be implemented in accordance with instructions of the Division of Administration.

	1978	1979	1980	1981	1982	1983
STC	91,400	119,600	110,500	110,500	127,250	109,000
Seminar Costs	166,200	97,550	114,050	149,050	125,500	117,500
Grants	40,000	40,000	48,000	62,000	55,000	66,000
Supply and Equipment	45,000	45,000	45,000	54,000	55,000	60,000
* Fellowships	(118) 412,500	(123) 451,650	(130) 499,330	(136) 547,264	(143) 603,170	(150) 661,950
Total	755,100	753,800	816,880	922,814	965,920	1,014,450

* Fellowships in the Field of Human Resources and Research

TARGET 3.1 DEVELOPMENT OF EDUCATIONAL TECHNOLOGY

A central coordinating body will be in charge of technical assistance, supervision, and evaluation of the sub-program. A regional survey will be made, to explore new educational needs and training demands in general, particularly, at the technical and auxiliary level. Basic and background information should be collected by an STC, and a technical meeting will set up strategies and alternative models to be adopted by countries. Local seminars and meetings are to be carried out for programming and promotion (5 local meetings per year). Adaptation and provisions for implementation and follow-up are to be made on a subregional basis. An evaluation scheme is to be prepared and applied on a permanent basis. A final evaluation will take place in 1983.

In this component activities will aim toward: a) development of educational technology at the Education and Health Research and Development Centers (NIDES) as part of the overall Latin American Programs of Health Educational Development (PLADES). It is estimated that by 1980, twelve NIDES in 10 different countries of the Region will be in full operations (1st phase). Other centers will be promoted in other countries (2nd phase); b) development of a nursing educational technology program through the establishment of subsidiary centers at the schools of nursing, devoted to methodological improvement and production of instructional materials and modules; c) development of innovative teaching techniques in dentistry, production of instructional materials and use of appropriate technology in oral health.

There are two Latin American Centers for Educational Technology on Health: CLATES-Rio de Janeiro and CLATES-Mexico. During the period, main activities will focus on staff development, implementation of large-scale training programs, and preparation of instructional materials. Priority areas will be maternal and child health, nutrition, communicable diseases and environmental health. Periodic courses at both CLATES, and country fellowships are required to train 20 professors and/or instructors in each country until 1983 (5 or 6 countries per year). The large-scale training system will require the development of a matrix of strategies and materials at both CLATES and a subsequent local adjustment made jointly with the countries of the Andean Pact and Mexico by 1980, and in the Dominican Republic, Haiti, the Caribbean community and southern countries of Latin America by 1981.

	1978	1979	1980	1981	1982	1983
Personnel Costs	145,770	157,188	168,166	177,747	188,699	200,499
STC	94,000	104,000	99,000	125,000	88,000	126,000
Seminar Costs*	68,600	73,800	88,600	91,600	57,000	59,000
Grants (Kellogg)	140,000	150,000	150,000	-	-	-
Grants (IDB)	50,000	50,000	70,000	70,000	-	-
Grants (AMR)	-	50,000	55,000	58,000	50,000	50,000
Production Costs	19,400	21,400	34,400	37,400	-	-
Supply and equipment	36,200	33,700	21,000	23,000	19,500	22,500
Fellowships	21,500	23,600	8,900	9,000	10,300	11,000
T o t a l	575,470	663,688	695,066	591,747	413,499	468,999

*Including extrabudgetary funds

TECHNOLOGICAL RESOURCES (HRT)

TARGET 3.2 PRODUCTION AND DISTRIBUTION OF INSTRUCTIONAL MATERIALS

Central Coordination will entail technical assistance, supervision and evaluation of the subprogramme, including: a) a regional survey of the programme status in extension of service coverage with particular reference to human resources needs and instructional materials for training national groups, etc.; b) development of norms and criteria for production and utilization of instructional materials for training of technical and auxiliary personnel, in priority programme areas. A regional experts' meeting will be called upon by 1979. Subregional meetings will be held afterwards in different countries; c) development of evaluation instruments to measure impact of activities in personnel education and training on a continuing basis.

With a loan from the Interamerican Development Bank (IDB) the Textbook Program will become an extended Instructional Material Program for all categories of health personnel, especially at the technical and auxiliary level involved in the extension of service coverage. The main activities to be carried on during 1978-1983 are as follows: a) creation of Textbook Selection Committees for pre-graduate and intermediate technical levels. During 1978 and 1979 13 Committees will start operations, and thereafter will be three new Committees per year up to 1983 when only one Committee will be established. The initial effort is to keep pace with the industrial production program; b) production and selling of textbooks and manuals in priority program areas; c) production and selling of audiovisual aids and other instructional materials to support large-scale training programs.

The successful development of educational programs based on large-scale training systems and production of instructional materials demands some local country adjustments. National groups need to be involved in order to participate actively in this process. Annual meetings will facilitate regional and country programming and coordination. Financial assistance will be provided to national groups for local production of instructional materials.

	1978	1979	1980	1981	1982	1983
Personnel costs	23,365	27,688	29,666	31,214	32,999	34,999
STC	150,500	124,000	81,000	90,000	99,000	78,000
Seminar Costs	42,000	45,200	33,800	32,000	21,000	43,000
Supply and Equipment	48,500	42,000	42,500	43,000	43,500	44,000
Printing Books*	350,000	700,000	600,000	500,000	400,000	400,000
Production of AV*	112,500	225,000	337,500	225,000	225,000	125,000
Publications	5,500	2,000	2,500	3,000	3,500	4,000
Total	732,365	1,165,888	1,126,966	924,214	824,999	728,999

*Revolving fund based on the loan from the IDB

TECHNOLOGICAL RESOURCES (HRT)

TARGET 3.3 DOCUMENTATION AND INFORMATION SYSTEM

The main objectives of BIREME are the collection, analysis and dissemination of scientific and technological information related to health priority areas. BIREME is also involved in the training of personnel in library and information sciences and acts as a regional reference center for Latin America. Through the Medline system, BIREME maintains a network of information's unit in several Brazilian's universities and in the new stage of development presented in this medium term program it is being proposed to extend such network to cover all Latin American countries. A major activity in this program is the Selective Dissemination of Information in priority areas such as MCH, Health Services, Nutrition, Communicable Diseases and Environmental Health.

A new important trend in this field is to direct selective dissemination of information toward the health services system, including both administrative offices at the Ministries of Health and professional personnel at the service level.

	1978	1979	1980	1981	1982	1983
Personnel Costs	437,360	463,038	480,266	489,364	510,399	541,449
STC	46,500	60,000	40,500	20,000	22,000	48,000
Seminar Costs	66,903	68,333	75,200	62,800	56,800	61,000
Grants	56,000	48,000	26,000	30,000	40,000	40,000
Supplies and Equipment	19,680	11,566	11,566	11,500	2,500	2,500
Publications	4,000	1,866	2,566	2,200	2,800	4,500
Library Acquisitions	20,000	25,000	25,000	30,000	30,000	40,000
Common Services	20,000	18,000	13,000	13,000	-	-
Contractual Services	10,250	11,000	12,000	15,000	15,000	18,000
Fellowships	42,000	48,500	51,000	55,500	60,000	65,000
T o t a l	722,693	755,303	737,098	729,364	739,499	820,449

FELLOWSHIPS GRANTED FOR THE PERIOD 1978-1980

COUNTRY	A	B	C	D	E	F	G	H	I	J	K	TOTAL
ARGENTINA *	1		2	7		4	4		1		9	28
ARGENTINA **	1.25		2.25	8.75		5.25	5		1		11.75	32.25
BARBADOS				2			4					6
BARBADOS				22			66					88
BOLIVIA		2	3	2		3	2	2	10		1	25
BOLIVIA		.75	12	10		2.75	4	11.5	9		1.5	51.5
BRAZIL		1		2		1	13		1			18
BRAZIL		.75		24.25		1	19.5		7.5			53
COLOMBIA			2	11		1	4					18
COLOMBIA			4.25	34.25		.25	3.50					42.25
COSTA RICA			4	4		3	6		3			20
COSTA RICA			13.5	42.5		25.75	47.75		23			152.5
CUBA							1		3			4
CUBA							4		2			6
CHILE	1		2	22		7	14		10		1	57
CHILE	2		19.5	35.5		12	47.75		9.75		.75	127.25
DOMINICAN REPUBLIC	4	1	8	16		4	2		3		3	41
DOMINICAN REPUBLIC	43.5	.75	74.75	81		9	6.25		2.25		9.5	227
ECUADOR		1	4	1		3	8		6			23
ECUADOR		.75	8.75	16.75		8.5	41		8.75			84.5
EL SALVADOR		1	9	15			2	3			3	33
EL SALVADOR		3.5	36.5	52			23.25	3.5			4.5	123.25
GRENADA								6				6
GRENADA								93.25				93.25
GUATEMALA				4		2	2					8
GUATEMALA				3		3.25	3					9.25
GUYANA				1			4	12				17
GUYANA				2			9	120				131
HAITI			1			1	1	1			1	5
HAITI			2				6	1			2	11
HONDURAS			1	4		3	3	2	13			26
HONDURAS			1.5	13.75		26	14	2	19.75			77
JAMAICA			1	1				4				6
JAMAICA			12	11.25				40				63.25
MEXICO		2	10	34		1	15	4	2		1	69
MEXICO		4.5	76	177.25		10.5	86.75	2.75	18		1.5	377.25
NICARAGUA	1		2	2		4	11				4	24
NICARAGUA	.5		14.75	21		21	66.75				7.5	131.5
PANAMA							5					5
PANAMA							23.50					23.50
PARAGUAY				1								1
PARAGUAY				2								2
PERU	1	1	3	2			1	7			1	16
PERU	.75	.75	4	3			15.75	7			1.5	32.75
TRINIDAD AND TOBAGO							1					1
TRINIDAD AND TOBAGO							8					8
URUGUAY				2			5				4	11
URUGUAY				1.75			12				4.5	18.25
VENEZUELA			10	3		12	10		6		3	44
VENEZUELA			37.25	14.75		25.5	60.25		5.5		4.5	147.75
WEST INDIES			3	2			61	25			6	97
WEST INDIES			39	18			524	279.5			42	902.5
TOTAL FELLOWSHIPS	8	9	65	138	0	49	179	159	65		37	609
PERCENTAGES	1.3	1.47	10.67	22.6	0	8.04	19.5	19.5	10.6		6.07	100%
TOTAL DURATION	48	11.75	377.75	594.75		137.75	109.7	553.5	113.5	91.5	91.5	3025.5
PERCENTAGES	1.58	0.38	12.48	19.65		4.5	19.73	34.8	3.75		3.02	100%
TOTAL BY GOAL			220				287			102		
TOTAL DURATION BY GOAL			1032.25				1788.25			205		

* NUMBER OF FELLOWSHIPS
** DURATION IN MONTHS

CONSULTANTS HIRED FOR THE PERIOD 1978-1980

COUNTRY	A	B	C	D	E	F	G	H	I	J	K	TOTAL
ARGENTINA	1	1		5		3	8	2	2			22
	6	12		68		36	81	20	22			245
BAHAMAS				1				1				2
				13				10				23
BARBADOS		2		3			4	28	1			38
		46		47			45	718	13			869
BOLIVIA	1		1	3		7	5	1	3			21
	6		30	18		165	86	13	39			357
BRAZIL		5	1	1			8	3	14			32
		78	24	10			123	140	168			543
COLOMBIA	1	5		1			5	1	12			25
	6	73		7			77	53	119			335
COSTA RICA		1	1	13		1	5		5			26
		28	10	185		30	67		42			362
CUBA	1					1	1					3
	10					18	7					35
CHILE	1			9		1	6	3	2			22
	6			111		10	75	19	14			235
DOMINICAN REPUBLIC	1	2	1	1		52	37	15	6			115
	90	20	18	10		2488	826	201	167			3820
ECUADOR	1	2		3		1	9	1	5			22
	13	42		95		12	124	7	52			345
EL SALVADOR			1				1					2
			90				5					95
GUATEMALA		1		10		2	4		6			23
		122		404		60	54		165			805
GUYANA				5		1	4					10
				178		135	208					521
HAITI									1			1
									14			14
HONDURAS		1		2		5	5	1	2			2
		92		36		63	73	5	24			24
JAMAICA				6		1		4				11
				169		7		35				211
MEXICO	4		3	5		4	29	4	5		1	55
	44		75	37		47	479	82	44		6	814
NICARAGUA	1			5		25	5	4	3		6	49
	30			39		1007	129	54	42		167	1468
PANAMA		1	2	1		3	3		4			14
		12	17	10		20	28		20			107
PARAGUAY	3						2		2			7
	18						31		22			71
PERU	1	3		1		3	9	5	3			25
	12	45		7		54	80	60	30			288
TRINIDAD AND TOBAGO						4	5	3				12
						30	47	25				102
URUGUAY				3		3	2	2	1			11
				14		17	7	11	6			55
VENEZUELA	2	5		5		4	9	6				31
	18	60		71		49	100	54				352
REGIONAL	2	50	13	9		4	69	14	42	80	37	320
	30	448	381	104		101	1152	289	507	710	303	4025
TOTAL ALL COUNTRIES	18	29	10	83		121	166	84	77	0	7	595
	259	630	264	1529		4248	2752	1507	1003		173	12365
TOTAL NO. OF STC'S	20	79	23	92		125	235	98	119	80	44	915
PERCENTAGES	2.20	8.50	2.50	10.5		13.60	25.60	10.60	13	8.80	4.70	100
TOTAL DURATION STC'S	289	1078	645	1633		4349	3904	1796	1510	710	476	16390
PERCENTAGES	1.75	6.60	3.95	9.95		26.55	23.80	10.95	9.25	4.30	2.90	100
TOTALS BY GOALS												
NO. STC'S		214					458			243		
DURATION		3645					10049			2696		

* NUMBER OF CONSULTANTS
 ** DURATION IN DAYS