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80th Meeting  
Washington, D.C.  
June-July 1978

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Provisional Agenda Item 20

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REPORT ON TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES

Corrigendum

1. Page 2, paragraph 5, line 1, should read: "The Center for Human Ecology and Health is also located in Mexico. . . ."
2. Page 5, paragraph 5, last line, substitute "Desk" for "Division."
3. Page 8, between paragraphs 5 and 6, the heading should read: "The Caribbean Community"; same page, last paragraph, substitute "desk" for "section."
4. Page 9, paragraph 1, line 6, substitute "desk" for "section."
5. Page 10, between paragraphs 1 and 2, insert heading: "Cuba and the Dominican Republic."
6. Page 11, last paragraph, lines 2 and 3 should read: ". . . the control of communicable diseases, and the health services of the border departments have satisfactorily coordinated their actions."
7. Page 12, paragraph 2, first line should read: "The National Health System of Colombia, in process of implementation, . . ."
8. Page 13, paragraph 1, line 2, third last word, should read: "functions."

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CE80/17 (Eng.)  
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REPORT ON TECHNICAL COOPERATION AMONG DEVELOPING COUNTRIES

The XXV Meeting of the Directing Council of PAHO, XXIX Meeting of the Regional Committee of WHO for the Americas, approved Resolution XXVIII on technical cooperation among developing countries, in which the Director was requested to report annually to the Directing Council on the progress of the coordination between the programs of the Organization and those carried on by the countries in the framework of technical cooperation among developing countries.

In compliance with that request, the Director submits in the present document a report on the action taken by the Member Countries in the TCDC context, with the Organization's cooperation, during 1977 and the first four months of 1978.

It is to be hoped that these activities will multiply and consolidate in the coming years as a result of the United Nations Conference on TCDC to be held in Buenos Aires from 31 August to 12 September 1978. The plan of action that the Conference adopts is sure to stimulate the process of cooperation among developing countries in all sectors, as much in the economic as in the social sphere, and, in the latter, in the field of health.

REPORT ON TECHNICAL COOPERATION  
AMONG DEVELOPING COUNTRIES

The World Health Organization assigns great importance to Technical Cooperation among Developing Countries (TCDC), as may be seen from the pertinent resolutions approved by its Governing Bodies. Resolution EB57.R50 urges the Member Governments to give preferential attention to TCDC in the health sector, and Resolutions WHA28.75 and WHA28.76 of the World Health Assembly recommend that increased support be given to the developing countries to enable them to achieve self-reliance.

At its 60th Session held in May 1977, the Executive Board approved Resolution EB60.R4, which lays the basis for future action of WHO in accordance with the principles and strategies of TCDC, both in collaborating in the preparation of the World Conference on TCDC and in systematically introducing the theory and practice of TCDC into its programs and activities.

At its XXV Meeting held in September-October 1977, the Directing Council of the Pan American Health Organization (XXIX Meeting of the Regional Committee of the World Health Organization for the Americas) approved Resolution CD25.28, which takes note of the decision of the WHO Executive Board and recommends to the Director that he promote and support TCDC programs in the Region, and submit to the Directing Council each year a report on the progress achieved.

Intercountry or subregional cooperation in the health sector has taken many forms in the Hemisphere. Bilateral cooperation in health matters has been a common practice, as is shown inter alia by agreements on food and nutrition, control of communicable diseases and zoonoses, manpower training, supply of vaccines, and environmental sanitation. These activities have been carried out as intercountry programs and through multinational centers.

Four groups of countries with which PAHO/WHO collaborates, at the request of their Member Governments, have signed technical and economic cooperation agreements, namely: the Agreement on Central American Economic Integration, the Caribbean Community (CARICOM), the Cartagena Agreement, and the Conference of Ministers of Foreign Affairs of the Countries of the River Plate Basin.

The Ministers of Health of the countries of three of these subregions have also signed agreements specific to the health sector, and hold annual meetings to discuss matters of common interest and decide upon activities or programs within the framework of TCDC, with the collaboration of WHO/PAHO. As these subregional structures are strengthened, regional and/or subregional cooperation multiplies and expands. The programs and activities this report deals with below are primarily those that have been undertaken by the countries with the cooperation of the Organization, and are dealt with by geographical area or subregion.

#### MEXICO, CENTRAL AMERICA AND PANAMA

With its broad network of institutions for the education and training of personnel, Mexico attracts many professional personnel from other countries of Latin America and the Caribbean area. PAHO/WHO collaborates with the Governments in coordinating the necessary procedures for selecting fellows.

In Mexico, where one of the Latin American Centers of Educational Technology for Health (CLATES) is located, appropriate technology projects on self-instruction and the mass training of health personnel are being carried out. In these centers technology is adapted and new systems of training and of evaluation of learning are developed. Technological advances, geared to the real needs and possibilities of the health services in the countries of the Region, are made available to university professors and instructors, schools, and the personnel training programs of the Ministries of Health.

The CLATES disseminate information on education and training courses and workshops held at their headquarters or in the countries and as a result of direct technical cooperation to training programs. The CLATES in Mexico devotes preferential attention to pedagogical training.

The Centro de Ecología y Salud Humana is also located in Mexico and devotes several of its programs to TCDC. For example, it is preparing a list of specialized consultants in human ecology (anthropologists, ecologists, etc.) who are nationals of the developing countries in the Region. The programs for measuring the impact of the environment on health are aimed at the development of appropriate methods that can be applied by the developing countries. The Center plans to establish a network of institutions for research and teaching in human ecology; these will be based on the national institutions of the developing countries in the Region. An information system will enable the developing countries to obtain all the information that they require on this aspect.

In this regard, the Center will undoubtedly act in the future as a catalyzing agent and enable the countries of Latin America and the Caribbean to promote TCDC in relation to the environment and its effect on the health of the population.

PAHO has provided the Secretariat for the Meetings of National Directors and Ministers of Health of Central America and Panama. The 1977 meeting was held in Panama. The purpose of these meetings is to provide an opportunity for an exchange of experiences and knowledge and to coordinate activities aimed at the study and solution of the common health problems of the countries of the subregion. PAHO financed the services of the officials who had undertaken to prepare the topics for the meetings and of the technical personnel that attended them. The Area Office and the Office of the PAHO/WHO Country Representative in Panama provided technical and administrative support.

Another activity undertaken in the subregion in 1977 was the training of personnel in social communications for the purpose of zoonosis control. This program was intended for all the countries in the area. Two tri-national courses were held in Honduras and El Salvador and were attended by personnel from the various countries.

The Program of Continuing Education in Maternal and Child Health is also a subregional program and has provided opportunities for the exchange of knowledge between personnel active in different fields in all the countries of the area.

With the cooperation of the Organization, courses were held on the control of diarrheal diseases, onchocerciasis, sanitary engineering, health and youth, and health standards, which were attended by instructors, teachers, or fellows from different countries.

During the year PAHO recruited officials from the countries of the area to serve as consultants in other countries of the same area, and frequently PASB personnel assigned to a country were used in another country of the same subregion.

In addition, the Organization served as intermediary for the joint purchase by the countries of the Region of insecticides and other supplies, as well as for the exchange of biological products between them.

The exchange of epidemiological, technical and administrative information for the purpose of improving health services was promoted through the Area Office and different consultants.

Finally, the Institute of Nutrition of Central America and Panama (INCAP) is located in this area. Its research, teaching, advisory, and information services are carried out in all the countries, all of which participate actively in the context of TCDC. The objectives of INCAP are similar to those of TCDC.

In Costa Rica, PAHO reported on intern and residency programs in manpower development which are conducted in that country, under inter-institutional agreements with other Central American countries and with Mexico; non-Costa Rican nationals are able to pursue postgraduate studies, and the expenses are shared by the country of origin (transportation) and the host country (fees, subsistence, teaching materials).

Courtesy arrangements are made through the Offices of the PAHO Representatives for the purpose of organizing programs of visits and field trips for national officials visiting other countries on official missions; the expenses are borne by the governments concerned.

PAHO collaborated in the negotiations that enabled Costa Rica and its neighbors to exchange vaccines, insecticides, antimalaria drugs and the like. It also took part in the negotiation of border agreements for the control of malaria, rabies and venereal diseases.

In El Salvador, meetings attended by representatives of all the agencies of the United Nations system, including PAHO/WHO, were held for the purpose of discussing and deciding on the most effective form of TCDC in that country. The result was the establishment of a focal point for TCDC in the Division of Technical Cooperation of the Ministry of Planning and Economic and Social Development.

A specific project designed to foster cooperation of this type was included in the UNDP National Cooperation Program with the Government of El Salvador. Representatives of PAHO/WHO have taken part, together with representatives of UNDP, in various activities designed to implement the program. Specifically, the PAHO/WHO contribution has been as follows: procurement of supplies from Central American countries, for example, vaccines and insecticides (El Salvador was both a donor and a beneficiary); recruitment of short-term experts in El Salvador for specific projects in the countries of the area and the Region; payment of fares and per diem allowances for members of scientific missions from other countries to collaborate in national programs; encouragement of the participation of officials from neighboring countries in courses and meetings, without cost to the country or to PAHO; preparation and exchange of information on the conduct of specific programs of interest to the countries.

With a view to the execution of institutional development programs, especially manpower training, Honduras and Nicaragua have received assistance from the University of Costa Rica, the National School of Health of Colombia, and the National Polytechnic Institute of Mexico.

Honduras was visited by officials from the ministries of health of the neighboring countries and from Colombia, who were interested in the programs for the extension of health service coverage in that country.

In Panama, the International Technical Assistance Office of the Ministry of Planning and Economic Policy is responsible for coordinating all TCDC activities.

In 1977 negotiations were successfully conducted with the Embassy of Brazil in Panama for the award of fellowships by the Government of Brazil for the public health training of personnel. Panama received ten fellowship months for courses at the School of Public Health in Sao Paulo. Venezuela offered fellowships, which Panama was able to take advantage of, as a result of the coordination and the services provided by PAHO/WHO. The country was recently visited by 35 dentists from Costa Rica who were interested in becoming familiar with the strategies and procedures used in the programs for the extension of dental health services in the country.

#### COUNTRIES OF THE CARIBBEAN SUBREGION

As the result of the appointment of a program coordinator in this subregion and the subsequent review of PAHO programs and activities in all the countries, it has been possible to focus on a more coordinated basis the Organization's Technical Cooperation Program in the English-speaking countries of the Caribbean. Accordingly, greater emphasis is being given to intercountry programs, in close coordination with the PAHO multinational centers: the Caribbean Food and Nutrition Institute (CFNI) in Jamaica and Trinidad, the Caribbean Epidemiological Center (CAREC) in Trinidad, and the Health Division of the Caribbean Community (CARICOM) in Guyana.

The larger and more developed countries of the Caribbean have traditionally aided their relatively less-developed neighbors. The University of the West Indies (UWI), of which there are branches in both Jamaica and Trinidad, has provided training for physicians, engineers, nurses and public health inspectors, who are to serve in their own and other countries of the Caribbean. The Organization has furnished technical cooperation to the Department of Preventive and Social Medicine and

to the Program of Advanced Training in Nursing of that University; both are soundly established educational institutions staffed by professional personnel from the Caribbean. The Organization has also cooperated in the preparation of curricula and training programs at the School of Engineering in Trinidad and in seminars on sanitary engineering.

In Jamaica, the Organization gave assistance to the programs for the training of dental nurses and physiotherapists. At present the two programs are operating independently and provide training in the above-mentioned disciplines to students from other Caribbean countries. The Organization awarded a certain number of fellowships.

In the College of Arts, Sciences and Technology (CAST), the Organization assisted in arrangements for offering courses in statistics and medical records. These training courses are open to students from all the Caribbean countries. The students who attend the courses offered by the CAST in these disciplines receive fellowships from the Organization.

The program for the training that is conducted in Regional Centers in the Bahamas, Jamaica, Barbados, Guyana, Trinidad and Tobago is intended for paramedical personnel from all the English-speaking countries of the Caribbean, including Belize. Priority was assigned to the training of personnel from the Windward and Leeward Islands at the request of the Ministries of Health of the Caribbean. This program, which is carried out by PAHO and financed by UNDP, UNICEF and CIDA, has meant a great step forward in satisfying the training needs of the Caribbean countries for paramedical personnel, in accordance with the true spirit of TCDC. Special attention is being given to the training of teachers so as to promote development of the capabilities of these countries, both singly and collectively, to make use of their own resources. Barbados, where the program is located, has provided the buildings where almost all of the courses are held, and has helped strengthen the faculty with local resources. Within the framework of this program, Guyana has established its Regional Training Center, and Trinidad and Tobago and the Bahamas are in the process of doing so. Jamaica has established institutes at the UWI and CAST in accordance with its functions as the seat of one of the five Regional Centers.

In 1977 PAHO awarded 209 training fellowships to the English-speaking countries of the Caribbean; 145 students attended training institutes in the region.

The Organization gave technical cooperation to the programs for the training of dental nurses and dental auxiliaries in Trinidad and Tobago, Guyana, and Suriname. These programs are open to fellows from all the countries of the Caribbean. The faculty is largely made up of



local personnel from these countries, who have played an essential role in designing the curricula. It is estimated that, in order to provide appropriate dental care services in the Windward and Leeward Islands, a total of 55 dentists and 225 properly trained auxiliaries is required.

The program for the training of animal health and veterinary public health assistants in Guyana is open to all the English-speaking countries of the Caribbean. Thirty-four animal health assistants from 13 English-speaking Caribbean countries graduated from the first two-year course, which ended in July 1977. PAHO provided technical cooperation, and the Governments of the Region made grants; two of them provided the services of seven instructors.

The mobile veterinary laboratory program, in which professional personnel from the Windward and Leeward Islands are working as instructors, is helping, with PAHO technical cooperation, to increase the diagnostic capacity of these countries.

Caribbean Food and Nutrition Institute (CFNI) and Caribbean Epidemiology Center (CAREC)

These two PAHO multinational centers in the Caribbean provide the countries of the region with technical cooperation, in accordance with the concept of TCDC.

The principal objective of CFNI is to cooperate with the countries of the Caribbean in formulating their national nutrition programs and policies. The Center coordinates its activities with those of the Ministries of Health, Agriculture and Education and those of other branches, where appropriate. At present, food and nutrition policies have been applied in Jamaica, Santa Lucia, and Guyana, and are being prepared in Barbados, Trinidad and Tobago, and Belize.

CFNI has cooperated with CARICOM in preparing a Regional Food and Nutrition Plan connected with the national plans of the countries of the region. In its activities, it seeks to use local consultants and advisers wherever possible. In 1977 a total of 10 short-term consultants from Caribbean countries was recruited by the Center.

CAREC, the scope and importance of whose work is continually increasing, promotes epidemiological control, laboratory services, and training, both within the Caribbean countries and between them.

The CAREC Consultative Committee is largely composed of local scientists and professional personnel, and plays an essential role in planning the present and future programs of the Center.

CAREC serves as a reference center for the bacteriological and virological specimens sent by the countries of the region, which it provides with diagnostic services during epidemics; in addition, it provides technical cooperation in connection with immunization programs organized within the framework of the Expanded Program on Immunization (PAI), which is of great interest to the Organization and a high priority for all the countries of the area.

In 1977 CAREC personnel trained 679 persons (406 in 1976) in 43 training sessions, of which 21 were held in Caribbean countries and outside Trinidad. In addition, they prepared manuals and training materials for the designated deputy epidemiologists, i.e., nurses or health inspectors the countries appointed to assist the designated epidemiologists selected by the countries.

The Trinidad Public Health Laboratory (TPHL) and CAREC collaborate closely and share the same building and campus and many common services. The Director of the TPHL is the Assistant Director of CAREC. Efforts are made to ensure that the services of the two institutions complement each other.

Through the coordinating efforts of CAREC, the countries are encouraged to develop their capabilities to be able to lend personnel to others in emergencies and draw up national epidemiological and control programs. During the outbreak of dengue in 1977, the countries of the area were encouraged to make the most of their capability to deal with this problem using their own resources.

The countries lent equipment and material to their neighbors. The CPC laboratories of San Juan (Puerto Rico), CAREC in Trinidad, and the Virus Laboratory of the UWI in Jamaica, the Gorgas Laboratory in Panama, and the National Institute of Health of Bogotá, Colombia, make up a network of reference laboratories for the virological and serological diagnosis of dengue fever.

#### CARICOM (Caribbean Community)

The principal objective of the Caribbean Community (CARICOM), which came into being as the result of the ratification of the Treaty of Chaguaramos in July 1973 in Trinidad, is the economic integration and development of the region. Among the most important targets established are the efficient operation of common services, and cooperation in the social, cultural, educational and technological sectors.

The health section of CARICOM, which is exclusively staffed by local personnel, is the administrative and coordinating organ of the Conference of Ministers of Health of the Caribbean (CHMC) and of the Technical and Scientific Committee (TESCO).

TESCO provides a scientific forum for the discussion and planning of the health strategies and programs presented to CHMC for ratification and support. PAHO furnishes considerable technical support to CHMC and TESCO for their meetings and for the implementation of the resolutions approved by CHMC, in collaboration with the CARICOM Secretariat, through its health section; in addition, it helps to coordinate the preparation of international and subregional health strategies for the Caribbean.

Through resolutions approved at the CHMC, CARICOM has fostered the application of regional strategies in the areas of environmental health, maternal and child health, and dental and mental health, and assigns great importance to development of managerial and administrative skills in the Caribbean countries. PAHO has supported these resolutions, which are designed to promote the self-reliance of the countries, through its collaboration with CARICOM.

The CARICOM sanitary engineer visited all the countries in the Caribbean in order to study the environmental health situation and, in collaboration with PAHO, provided a status report that will serve as a basis for developing a subregional strategy.

CARICOM recruited a Barbadian psychiatrist as a consultant to review the mental health programs of the Caribbean countries. The findings of this survey were sent to PAHO for comment, and the pertinent activities will be coordinated with the CARICOM Secretariat.

On behalf of the Caribbean countries, the Caribbean Community, in cooperation with the United Nations Action Program for Economic Cooperation between Nonaligned and Developing Countries (UNAPEC) and the Pan American Health Organization, has fostered the formulation of a subregional drug policy based on a selected list of drugs, and proposes bulk purchase and wrapping of drugs and, if possible, the manufacture of some of them in the area.

In cooperation with PAHO and other agencies, CARICOM has helped to coordinate and foster intercountry activities in the Caribbean. For example, it administered a grant awarded by the U.S. Center for Disease Control (CDC) for epidemiological surveillance activities in the region. It was largely used for the activities initiated by CAREC in cooperation with CARICOM.

A CIDA grant for the training of paramedical personnel in the Windward and Leeward Islands has been delivered to PAHO through CARICOM, which on its own initiative applied to the Commonwealth Development Fund (United Kingdom) and bilateral sources in the United States for funds for supporting intercountry environmental health programs as well as health

service management and administrative programs. The Pan American Health Organization has collaborated in these activities, and has provided these important priority sectors in the Caribbean with technical cooperation.

Cuba has undertaken a broad program of technical and scientific cooperation with Mexico, which is coordinated by the National Council of Science and Technology of Mexico and the Committee for Scientific and Technical Development of Cuba. As part of this program, specified activities have been carried out in the health area under special agreements between the Ministry of Health and the Mexican Institute of Social Security, between the University of La Habana and the Autonomous University of Mexico, and between the Higher Institute of Health of Santiago de Cuba and the University of Guadalajara.

In Santo Domingo the loans granted to the Dominican Republic by the IDB have been used to promote international technical cooperation in the context of TCDC. Through the Institute of Social Security and the National University, the University of Guadalajara and the Autonomous University, Mexico has collaborated in sending consultants to conduct fellowship programs and produce educational material.

#### ANDEAN PACT COUNTRIES

The Hipólito Unanue Agreement, which has been in force for seven years, has received collaboration from the Pan American Health Organization from the first meeting of the Ministers of Health of the Andean area. The policy of the Agreement, as well as the programs and priorities identified in the health, environmental science, and health education areas coincide with those defined by the Governing Bodies of the Organization and in the Ten-Year Health Plan for the Americas, 1970-1980. The present structure of the Pan American Health Organization and the functions expressly assigned to Area IV to enable it to collaborate in identifying and executing subregional programs have made it possible for it to participate in this important integration movement.

PAHO collaborated with the signatory countries of the Cartagena Agreement and the Hipólito Unanue Agreement in holding four important meetings, namely: First Meeting on Basic Drugs; First Meeting of the Advisory Committee on Health Information Systems; First Meeting of the Advisory Committee on Occupational Health; and First Meeting of the Advisory Committee on Biology in the Highlands. At these four meetings, the Executive Secretariat of the Hipólito Unanue Agreement and the Member Governments requested PAHO to provide technical cooperation in programming each meeting, in holding it, and in preparing the final report.

In accordance with the resolutions approved in the IV Meeting of the Ministers of Health of the Andean Area, held in Bogotá, Colombia, in December 1977, the Organization assisted the Executive Secretariat of the Agreement in its work, including the provision of premises and technical cooperation activities.

The Organization also collaborated with the Executive Secretary of the Hipólito Unanue Agreement in preparing and holding the V Meeting of Ministers of the Andean Area, held in Santa Cruz, Bolivia, in early April 1978. At that meeting the Ministers of Health approved an important resolution to the effect that the program of joint Hipólito Unanue Agreement/PAHO/WHO activities should be determined in the context of TCDC. The operative part of the resolution reads as follows:

1. To recommend to the Executive Secretariat that it make a survey of the legal provisions conducive to TCDC.
2. To establish a working group to review the findings of the survey and to suggest mechanisms for promoting technical cooperation among the countries of the Andean Area.
3. To request the assistance of the Pan American Health Organization/World Health Organization in achieving the purposes mentioned in the foregoing items.

In Bolivia PAHO continued to collaborate with the Government in financing fellowships for Bolivian officials, most of whom were assigned to Latin American countries. A national of the Turks and Caicos Islands is studying medicine in Bolivia on a fellowship awarded by the Organization.

PAHO enabled officials of the Government of Bolivia to attend various seminars, courses, and workshops held in the region in the past year.

PAHO participated and collaborated in the border meeting between Bolivia and Peru on the control of foot-and-mouth disease. Bolivia received supplies and equipment acquired through the Organization in other countries, especially biological products from Colombia and Peru. Specimens from Bolivia are sent to Peru for the purpose of poliomyelitis diagnosis.

Colombia has entered into agreements with Venezuela and Ecuador on the control of communicable diseases, and the sectional services of the border departments have been satisfactorily coordinated.

Colombia and Venezuela are jointly participating in the control of foot-and-mouth disease and VEE, as well as in food hygiene and control programs, with the assistance of PASB staff.

The National Health System of Colombia, which is being installed, has been studied by professionals from other countries. The strategies for the extension of health service coverage and the reassignment of functions to auxiliary personnel have been the most important aspects of the reviews made by personnel from other countries.

Colombia has supplied biological products, such as yellow fever vaccine, to other countries in the region, especially to those of the Andean group.

It is in the area of manpower training that TCDC has been especially successful. Colombia awarded 59 fellowships to various countries in the region for training in health service and maternal and child health administration, public health administration, physical planning of hospital architecture, administration of engineering services, ambulatory care nursing, pediatric nursing, maternal and child health nursing, and for supplementary courses for a degree in nursing. The Ministry of Public Health coordinated these activities with several universities in the country and with the National School of Public Health.

Ecuador has entered into border agreements with Peru and Colombia, especially on communicable diseases, including the zoonoses. In addition, the Institute of Dental Resources is located in that country, and its principal purpose is to train dental health auxiliaries for the country and, in the future, for the member countries of the Hipólito Unanue Agreement.

Ecuador has accepted a large number of fellows from other Latin American countries who wish to study its dental health service programs in rural areas. The Organization has assisted the Government in these activities.

In accordance with the concept of horizontal cooperation, PAHO/WHO has fostered the use of Peruvian technical resources in other countries of the Hemisphere, and experts from different Latin American countries have advised Peru on aspects of special interest to the Government.

PAHO/WHO participated in the selection of fellows and the award of fellowships to 28 professional personnel from Peru, of which 26 studied in Latin American countries.

PAHO/WHO provided assistance in three meetings held in Peru on the Expanded Program on Immunization, the expanded functions of nurse-midwives, and the prevention of traffic accidents. The meetings were attended by professionals from the Andean Area.

PAHO provided assistance to bilateral meetings held in the border area in Puno, between Bolivia and Peru, the purpose of which was foot-and-mouth disease control. It also provided assistance in preparations for similar meetings between Peru and Ecuador and Peru and Chile.

Peru received VEE and yellow fever vaccines from Colombia, and sent rabies vaccine for the treatment of human cases to Bolivia. The National Institute of Health of Peru has established reference centers for influenza and enterobacteria; it also examines specimens sent from Bolivia for the purpose of poliomyelitis diagnosis. The exchange of raw materials for the production of snake bite sera has begun between the Butantan Institute of Brazil and the National Institute of Health of Peru.

The Secretariat of the Hipólito Unanue Agreement is located in Lima, as is the Board of the Cartagena Agreement. As already mentioned, the PAHO/WHO Area Office is responsible for the continuing coordination of activities with the Executive Secretariats of the two agreements.

CEPIS, which is also located in Lima, is one of the PAHO/WHO centers which has promoted effective technical cooperation among the developing countries and for that purpose has used some of the most qualified experts in the Region of the Americas in sanitary engineering and environmental sciences.

Among the multinational projects of the Center, that are in line with the principles and objectives of TCDC, mention must be made of the Pan American Air Pollution Sampling Network, the Regional Program for Quality Control in Laboratories for the Analysis of Water and Sewage, the Program of Studies in Multinational Water Resources, and the Occupational Health Program in Central America.

In 1977 two courses were held at the Center: a Workshop/Course on Air Quality Surveillance and Administration, which was attended by 38 professionals from 11 Latin American countries, and a Course on Methods of Water Treatment for Developing Countries, sponsored by the International Center for Training in the Environmental Sciences (CIFCA), for Spanish-speaking countries. PAHO consultants and Latin American professional personnel recruited especially for that purpose served as instructors in the two courses. In addition, CEPIS assisted in 14 courses in its special field offered in different countries of the region.

In 1977 CEPIS also undertook research designed to develop appropriate environmental technology that can be applied in developing countries. Finally, CEPIS serves as the PAHO regional center for information and reference in sanitary engineering and environmental sciences, as a WHO collaborative center in public water supply for the Region of the Americas, and as a collaborative institution of the International Reference Center for Sewage and Solid Waste Disposal.

In Venezuela, the Area I Office helped to disseminate the concept of TCDC and urged the national authorities to identify areas of activity in which that concept could be applied. Basically, the aim is to identify possible centers of excellence that can provide the other countries with significant technical cooperation in health. One of them is the Institute of Dermatology of the Ministry of Health and Social Welfare. The Pan American Center for Research and Training in Leprosy and Tropical Diseases, which was established in that Ministry, is capable of providing all the countries in the Region with technical advisory services in manpower training. Another example is the international courses in epidemiology and epidemiological surveillance and in tuberculosis control. Recently, the project for the establishment of a training center for experts in the maintenance of biomedical and laboratory equipment was finalized. In the future, it will cooperate with other countries of the Region.

Since 1976 Venezuela has been participating in a cooperative program with certain Caribbean countries. That program, for which the Institute of Foreign Trade of the Ministry of Foreign Relations is responsible, has a health component which involves various forms of technical cooperation.

The health adviser of the Institute of Foreign Trade has requested the assistance of the Organization, primarily through its representatives in Venezuela, Trinidad and Tobago and Barbados, so as to ensure that that cooperation conforms as far as possible with the health plans and programs within the framework of the PAHO/WHO Technical Cooperation Program in the countries of the area.

#### CHILE AND THE COUNTRIES OF THE RIVER PLATE BASIN

In Chile, most of the technical cooperation activities are carried out through the Organization. The country has entered into a bilateral agreement with Ecuador for the advanced training of physicians; a large number of Ecuadorian professional personnel are trained in Chile. A similar agreement has been concluded with Brazil, where seven Chilean professionals were trained.



The Ninth Meeting of the Foreign Ministers of the River Plate Basin, held in Asunción from 5 to 9 December 1977, adopted a number of resolutions, foremost among which were those resolving to ask the Inter-governmental Coordinating Committee (CIC) to convene a meeting of government health authorities with a view to undertaking joint activities against communicable diseases; to instruct the CIC to approach the Pan American Health Organization for the purpose of obtaining funds for a regional program for the prevention and control of Chagas' disease; to recommend to the Governments that they accept health certificates issued by national authorities in migration proceedings, and that the CIC organize a meeting for the purpose of standardizing criteria and requirements; to promote the coordination of information on the teaching, diagnosis, and control of sexually transmitted diseases; to instruct the CIC to convene a meeting of specialists for the purpose of aligning standards on the prevention, control, and suppression of illegal drug traffic; to recommend to the Governments that they submit reports to the CIC on their nutrition programs or projects, and that the CIC convene meetings of specialists to evaluate the information upon which joint plans should be based. An observer from PAHO/WHO attended the Meeting of Foreign Ministers of the Countries of the River Plate Basin and, as stated above, the assistance of the Organization was requested in implementing the pertinent resolutions.

In the countries of the River Plate Basin, many TCDC activities are being carried out in the area of health manpower training with the assistance of the Organization or directly between those countries and other developing countries. As the concept of TCDC takes root, especially following the World Conference in Buenos Aires, more complete information on these activities will be available.

Pan American centers whose activities are in line with TCDC are located in three of these countries.

The Pan American Foot-and-Mouth Disease Center, which is located in Rio de Janeiro, and the Pan American Zoonoses Center, which is located in Buenos Aires, are well known throughout Latin America for their technical cooperation activities with the countries, the purpose of which is research and the training of personnel in zoonoses control and to promote such cooperation between the countries.

The Regional Library of Medicine (BIREME), which is located in Sao Paulo, is capable of extending its radius of action to the other countries of Latin America for the purpose of disseminating scientific information on health.

The Latin American Center of Educational Technology in Health (CLATES), whose structure is very similar to that of CLATES (Mexico) described above, but oriented towards research and development of technologies, is also located in Brazil.

The Latin American Center for Perinatology and Human Development (CLAP), which is located in Montevideo, promotes TCDC in research and training, and has set in motion a process of appropriate technology in this aspect that is of high priority for the countries of Latin America, and can be applied in other regions of the developing world.