



*executive committee of  
the directing council*

PAN AMERICAN  
HEALTH  
ORGANIZATION

*working party of  
the regional committee*

WORLD  
HEALTH  
ORGANIZATION



56th Meeting  
Washington, D. C.  
April-May 1967

Provisional Agenda Item 21

CE56/19 (Eng.)  
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ORIGINAL: SPANISH

INTENSIFICATION OF HEALTH PROGRAMS - DECISIONS TAKEN AT THE MEETING OF  
THE AMERICAN HEADS OF STATE

The Government of Panama requested the inclusion in the Agenda of the 56th Meeting of the Executive Committee of an item on the intensification of health programs mentioned in the Declaration of the American Presidents approved at Punta del Este on 14 April 1967.

To facilitate the examination of this item, this paper deals with the background to the activities undertaken by the Pan American Sanitary Bureau at the different stages that culminated in the decisions taken by the American Presidents.

The XVII Pan American Sanitary Conference urged the Director to endeavor to obtain the inclusion in the Agenda of the Second Meeting of Heads of State of "health problems which because of their characteristics and scope call for solutions at the highest level" (Resolution XXX). The Conference indicated that in its opinion a meeting of such continental importance should deal not only with economic questions, which are essential, but also with problems which, by reasons of their nature, have a direct bearing on the welfare of the people.

In compliance with these instructions, the Director informed the Secretary-General of the Organization of American States of the Resolution of the Conference, and obtained his full support for the inclusion on the Agenda of the Meeting of Heads of State of an item dealing with health activities. Furthermore, on 31 October 1966 he sent Dr. Mora a letter (Annex 1) indicating some of the problems that afflict large segments of the population of the countries, and which are therefore of political and social importance. He also indicated that there were proven methods for gradually solving these problems but that external credit as well as national funds would be required. For these reasons, they merited the attention of the Heads of State.

He refers specifically to the following: a) the improvement of living conditions in the rural areas of Latin America, in dealing with which a comprehensive approach based on the active and responsible participation of the population should be used; b) higher education, based on the application of modern science and technology and respect for the cultural characteristics of each society through "multi-national institutions for advanced training in science and technology"; c) the intensification of the Ten Year Public Health Program set forth in Resolution A.2 of the Charter of Punta del Este; and d) the reaffirmation of the principle that health activities are a fundamental component of development, which should find practical expression in the inclusion of programs for the prevention and cure of diseases in every national or international development project.

The Secretary-General of the Organization of American States transmitted this letter to the OAS Council on 22 November and informed the Director that, in his speech to the Preparatory Commission of the XI Meeting of Consultation of Ministers of External Relations, he had stressed the importance of taking into account the views of the Pan American Health Organization on, and its plans for, the Alliance for Progress.

The Ministers of Health were given a detailed report of these negotiations, and it was suggested to them that, if they were in agreement with the proposals made, they should take steps to have their government support them through their Ambassadors to the Organization of American States whose Council was acting as the Preparatory Commission for the Meeting of Heads of State. This request was generally well received, and again pointed up the interest of the governments in health problems.

The above-mentioned Commission appointed a group of special advisers to prepare a document covering the economic and social questions to be submitted to the Presidents of the American Republics. It contained a brief reference to health and suggested that the Director of the Pan American Sanitary Bureau should be consulted for further details on the proposed programs.

At the request of the Secretary-General of the Organization of American States, the Director provided him on 18 January 1967 with four documents dealing in detail with the proposals (Annex No. 2).

The paper dealing with rural welfare is entitled: "Community Water Supplies - a Discussion of Financing" (Annex No. 3). It describes how to put into effect the following proposals designed to benefit 40 million people: a) to step up the program and accelerate construction in the second half of the decade of the Alliance for Progress; b) to strengthen community organization and develop the potential for self-help; c) to establish in each country a self-financing mechanism that would enable rural communities to undertake such community projects as they might select.

The second suggestion dealt with multi-national collaboration for education and research in biology, medicine and the health sciences. The document entitled: "The Development of Biomedical Science and Education in Latin America", (Annex No. 4) deals with the general premises of such collaboration, and methods for identifying university institutions and departments which might be used as international centers for training teachers and for improving instruction in schools of medicine, the aim being to create a true intellectual community in the biomedical and social sciences.

The documents entitled: "Health Goals in the Charter of Punta del Este - Facts on Progress", contains the supporting data for a request to the Heads of State to reaffirm the decision to implement the Ten Year Public Health Program contained in Resolution A.2 of the Charter. In his letter, the Director said: "Although much has already been done, there is still much to do if the goals of the Alliance for Progress are to be reached. Nevertheless, much valuable experience has been gained, experience that is essential if a greater yield is to be obtained from the available human, material, and financial resources, and from those that must be invested if further progress is to be made. All this adds up to the fact that since the Alliance for Progress the Americas have truly achieved self-consciousness".

As for the principle that health activities are a basic component of development the Director stated: "The fourth suggestion deals essentially with a decision which we should like the Presidents of the American Republics to make, and which would serve as a basis for a rule, a practice to be followed, whenever a development project is being prepared in the Americas. Indeed, we do not believe that it is necessary to argue about the significance of death, disease, and disability for production and productivity, whatever the nature of the economic development program. Furthermore, in our opinion, there is little point in discussing the significance of improving the physical environment for the exploitation of natural resources. Similar arguments also occur when industrialization, agricultural development, and urbanization are discussed. Obviously, consideration must be given to health as a social service in the pre-investment phase of any project involving the above-mentioned activities. This is not being done today. Hence, our suggestion that the Heads of State establish it as a principle, a norm which, as we said, will lead to its becoming a practice in government, international credit agencies, and the international organizations that advise them."

The above-mentioned proposals and the documents supporting them were endorsed by the Secretary-General of the Organization of American States, and transmitted to the Preparatory Commission and to the XI Meeting of Consultation of Ministers of External Relations (Second Session, Buenos Aires, 15-27 February 1967). The delegations of two countries at that meeting included health experts, and a representative of the Pan American Sanitary Bureau was also present. After several alternatives had been considered, the provisional agenda of the meeting of Heads of State was drawn up, item V being entitled: "Educational, Technological, and Scientific Development and Intensification of Health Programs".

The Ministers of External Relations decided to prepare a document to facilitate the discussions of the Presidents of the American Republics. It acknowledged the fundamental role of health activities in economic and social development in Latin America. It proposed the application of modern science and technology to the control of communicable diseases, sanitation, and improvement of nutrition in young children and in low-income groups. To achieve these aims it recommended the strengthening of the infrastructure through planning and the mobilization of internal and external resources for financing activities.

This document entitled: "Guidelines for the Preparation of the Agenda of the Meeting of the Heads of State" was prepared at the XI Meeting of Consultation of the Ministers of External Relations. It also established a special committee of the personal representatives of the Presidents of the American Republics which, in the light of these guidelines, was to approve the drafts of the documents for the Punta del Este meeting.

The Director sent the Ministers of Health a copy of the approved guidelines and suggested that consideration be given to the inclusion of a health expert in the delegation of their country to the meeting of the personal representatives. Six governments designated an adviser as a member of their delegations. The Organization also sent a representative. During the meeting the chapter on health activities was the subject of a careful examination during which modifications were made in it, and basic aspects were introduced. The final text was approved at the Third Session of the XI Meeting of Consultation of Ministers of External Relations at Punta del Este, and submitted to the Presidents of the American Republics for approval.

At that session it was decided to invite to the Meeting of the Presidents of the American Republics certain international organizations, including the Pan American Sanitary Bureau in the person of its Director, who was present throughout the meeting.

Chapter V.C. of Part II (Action Program) of the document entitled: "Declaration of the Presidents of America" is reproduced below. It contains the decisions on the intensification of health programs.

"The fundamental role of health in the economic and social development of Latin America demands that the prevention and control of communicable diseases be intensified and that measures be taken to eradicate those which can be completely eliminated by existing techniques. Also programs to supply drinking water and other services essential to urban and rural environmental sanitation will be speeded up."

"We will expand programs for improving the health of the American peoples."

"C. Health

Improvement of health conditions is fundamental to the economic and social development of Latin America.

Available scientific knowledge makes it possible to obtain specific results, which, in accordance with the needs of each country and the provisions of the Charter of Punta del Este, should be utilized to attain the following objectives:

- a. Control of communicable diseases and eradication of those for which methods for total elimination exist. Pertinent programs shall receive international coordination when necessary.
- b. Acceleration of programs for providing drinking-water supplies, sewerage, and other services essential to environmental sanitation in rural and urban areas, giving preference to lower-income groups. On the basis of studies carried out and with the cooperation of international financing agencies, national revolving fund systems shall be used to assure the continuity of such programs.
- c. Greater and more rapid progress in improving nutrition of the neediest groups of the population, taking advantage of all possibilities offered by national effort and international cooperation.
- d. Promotion of intensive mother and child welfare programs and of educational programs on overall family guidance methods.
- e. Priority for basic and advanced training of professional, technical, administrative, and auxiliary personnel, and support of operational and administrative research in the field of health.
- f. Incorporation, as early as the preinvestment phase, of national and regional health programs into general development plans.

The Presidents of the member states of the OAS, therefore, decide:

1. To expand, within the framework of general planning, the preparation and implementation of national plans that will strengthen infrastructure in the field of health.

2. To mobilize internal and external resources to meet the needs for financing these plans. In this connection, to call upon CIAP, when analyzing the health sector in national development programs, to take into account the objectives and needs indicated.

3. To call upon the Pan American Health Organization to cooperate with the governments in the preparation of specific programs relating to these objectives."

It is clear that the Declaration of the Heads of State reaffirms the postulates of the Charter of Punta del Este, and the decision to achieve its health aims. It mentions certain basic problems and suggests solutions based on the experience acquired since the signature of the Charter. It indicates an intention to give greater extent, depth, and speed to programs designed to benefit an increasing number of persons with the resources available and external loans. This is for the short run. For the long run, it reaffirms planning as a part of economic and social development, education and training, and research as essential tools for preventing disease, and promoting and restoring health.

The fact that a document signed by the Heads of State assigns the Pan American Health Organization specific functions is worthy of mention; it also reflects the responsibility of the Governments, the Governing Bodies, and the Secretariat of the Organization to put into effect health programs in the way laid down by the Presidents of the American Republics.

This document is being submitted to the Executive Committee to facilitate its examination of the measures that should be taken.

Annexes

CE56/19 (Eng.)

A N N E X 1



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

525 TWENTY-THIRD STREET, N W , WASHINGTON, D C. 20037, U S A

CABLE ADDRESS OFSANPAN

TELEPHONE 223-4700

IN REPLY REFER TO:

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TRANSLATION

31 October 1966

Dear Dr. Mora:

By Resolution XXX of the XVII Pan American Sanitary Conference, which was recently held at our Headquarters, I was entrusted to take steps to ensure that certain health problems, which because of their characteristics and scope call for decisions at the highest level, be placed on the agenda of the forthcoming meeting of Heads of State. This resolution is in line with that adopted by the Ministers of Health of Central America and Panama at their XI Annual Meeting held in Guatemala City in August 1966.

In the recent interviews you were good enough to grant me, you mentioned the importance you attached to this matter and offered me your valuable support, which is the reason why I am writing to you now.

The idea behind the above-mentioned resolutions is that a Hemispheric meeting at the highest political level should consider in conjunction with essential economic questions, problems which, because of their very nature, directly affect the well-being of our peoples. Among them is the matter of health, which is a basic component of economic and social development, a fact recognized in the Act of Bogota and reaffirmed in the Charter of Punta del Este.

I should therefore like to submit to your consideration certain health problems which merit the attention of the Presidents of the American Republics, because they affect large segments of the population of our countries and proven methods for solving them are available. They are important politically and investments of external capital are needed if their solution is to be accelerated.

Improvement of the conditions of life of over 100 million inhabitants of the rural areas of Latin America has become perhaps the most urgent and important social problem of our Hemisphere. In the health field, our research has disclosed that in the rural communities the mortality rate in the age group 15 to 45 is as much as three times

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Dr. José A. Mora  
Secretary General  
Organization of American States  
Pan American Union  
Washington, D. C.



higher than in the large cities of the same country. There are vast areas that lack even minimal health services and where sanitation is non-existent or very deficient and the population is seriously undernourished. Similar conditions prevail in housing, education, agricultural production and income.

In attacking the problem a comprehensive approach must be used, based on the active and responsible participation of the inhabitants, through rural community development. In dealing with sanitation in these communities, the experience acquired during the first 5 years of the Alliance for Progress shows that a sound and adequately financed plan can produce rapid benefits for an ever larger number of persons. Indeed, with an investment of US\$200 million, of which US\$65 million represented foreign loans, potable water has been supplied to 15 million persons in rural areas. To reach the goal established in the Punta del Este Charter of supplying potable water to 50% of the rural population by 1971, services must be provided for an additional 40 million inhabitants, that is, for 8 million persons per year. Activities such as these, or others selected by the communities, motivate the inhabitants to undertake other projects for the common welfare, especially if an efficient financing mechanism is established.

We believe that our Organization possesses sufficient experience and the necessary basic technical and administrative structure, which may be expanded, to assume responsibility for or to participate in a steadily expanding rural welfare program. We are in a position to propose both the principles on which such a program should be based and the ways and means for implementing it, including foreign capital that would act as a catalytic agent for sanitation projects and, consequently, other community development projects.

Higher education is essential if we are to achieve economic and social development based on the application of modern science and technology and respect for the cultural characteristics of each society. We were therefore very pleased to hear President Johnson's reference to "multinational institutions for advanced training in science and technology" in the statement he made at our Headquarters on the occasion of the fifth anniversary of the Alliance for Progress. In my opinion, the general principles enunciated by the President may be very effectively applied to education and research in the arts and sciences related to biology, medicine, and health.

Some countries possess excellent training centers. Through carefully planned cooperation, their benefits may be extended to all countries, especially to those whose need for professional personnel is patently greater. New centers for other disciplines must also be

31 October 1966

created. They would permit specialized training in an environment similar to that from which the students will come. Naturally, for certain very specialized research or studies they would continue to go the United States or to other technologically advanced countries. Furthermore, such a project would help to moderate the migration of technical personnel, which is a matter of considerable concern to many governments of the Hemisphere, in that it would provide such personnel with opportunities for research and advanced studies, both during their training and on their return home.

Our Organization is in a position to prepare for the consideration of the Presidents of the American Republics a detailed program, which we would undertake with the Pan American Federation of Associations of Medical Schools. We already possess experience acquired in developing such an activity on a limited scale.

In our opinion, the report on achievement in the field of health in terms of the goals of the Alliance for Progress, which was submitted to the Fourth Annual Meeting of the Economic and Social Council in Buenos Aires in March of this year, offers the Heads of State solid ground for considering the advisability of reaffirming their decision to implement gradually the Ten-Year Public Health Program spelled out in Resolution A.2 of the Charter of Punta del Este. It covers the most important problems in the Hemisphere, attainable goals, modern instruments, techniques and procedures, and is based on 5 years' experience. These activities demand more efficient utilization of the available human and material resources through sound planning and competent organization and administration of services, and, in certain instances, the investment of external capital.

Finally, we consider it most desirable that the principle that health is a basic component of development should be reaffirmed and should find practical expression in the inclusion of programs for the prevention and cure of diseases in every national or international development project. Such a proposal is very necessary; despite substantial progress in the field of planning there are still countries that have not yet drawn up comprehensive plans. Furthermore, even if such plans do exist, it is still essential to protect and promote the health of those who are implementing the programs of the various sectors of the economy. What needs to be done is to establish a norm - a habit - and the decisions of the Heads of State will constitute a powerful inducement to that end.

Your kind consideration of this communication and your opinion of our proposals will be deeply appreciated. I should be very pleased to send you without delay any further information you may require.

Sincerely yours,

Abraham Horwitz  
Director

CE56/19 (Eng.)

A N N E X 2



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

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CABLE ADDRESS OFSANPAN

IN REPLY REFER TO: D

TELEPHONE 223-4700

TRANSLATION

18 January 1967

Dear Dr. Mora:

It is my pleasure to send you the documents supporting the suggestions for the Agenda of the Meeting of the Presidents of the American Republics which I had the honor to submit to you in my letter of 31 October 1966.

1. The first of these suggestions deals with rural welfare, especially water supply services. Its goal is that enunciated in the Charter of Punta del Este, that is to say, to supply 50 per cent of the rural population - or 40 million persons - with drinking water by the end of the decade. The suggestion has three fundamental purposes: a) to step up the program and accelerate construction in the second half of the decade of the Alliance for Progress; b) to strengthen community organization and develop the potential for self-help; c) to establish in each country a self-financing mechanism that will enable rural communities to undertake such community projects as they may select.

The experience gained during the first five years of the Alliance for Progress shows that the signatory governments and international credit agencies, in particular the Inter-American Development Bank, have assigned more than a billion dollars for water programs. Of this amount, approximately 175 millions is being invested in rural water supply programs that will benefit 15 million persons living in about 20,000 small communities. These results fall short of the goal set forth in the Charter of Punta del Este. Nevertheless, they represent valuable experience that justifies new impetus being given to this program in the next five years.

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Dr. José A. Mora  
Secretary General  
Organization of American States  
Pan American Union  
Washington, D.C.

18 January 1967

We now know about the attitude of the population, their manifest will to improve their conditions of life, to make contributions in cash and in kind. It has been possible to devise various methods for accelerating the construction of services. Hence the imperative need in each country for a permanent financing mechanism that will enable new public works to be undertaken in rural areas. Under the present system there is no such possibility because funds are earmarked for each project and there are no returns with which a national revolving fund for the above-mentioned purposes can be established.

Because of its political, economic, and social importance we attribute great importance to this program and believe it merits consideration by the Presidents of the Republics so that it may be gradually put into practice under their distinguished sponsorship.

2. The second suggestion deals with multinational collaboration for education and research in biology, medicine, and the health sciences. In my letter of 31 October I referred to the statement made by President Johnson on the occasion of the Fifth Anniversary of the Alliance for Progress held at our Headquarters, in which he emphasized the need for "multinational centers for advanced training in science and technology". I should like to suggest that the above-mentioned disciplines be included. I believe it essential that the mechanisms for stimulating the cooperation of various countries in the field of science and technology be both flexible and diversified, since both the needs and the necessary resources and organization in the different fields vary considerably. For this reason I believe that while high priority should be given to multinational collaboration it should be accepted that there are various methods for achieving it. As far as biology, medicine, and the health sciences are concerned, there are outstanding teaching and research institutions in the various countries that might become international centers. Other centers for given branches of science, all of which have the requisite characteristics, must be identified, an arrangement that will enable a series of universities in various countries to participate in this program.

The detailed study should cover advanced training of graduates in selected institutions and the supply of teachers to schools of medicine that need them. This program should help to moderate the migration of scientists by offering them opportunities for research and advanced training at home.

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18 January 1967

The attached document outlines the basic premises and purposes of this proposal, the organization for carrying it out and some illustrative examples. If this item is included in the agenda and the proposal approved by the Presidents of the American Republics, we would be prepared to spell it out in concrete terms, including the arrangements for financing it, within six months after the meeting.

3. The document entitled "Health Goals in the Charter of Punta del Este - Facts on Progress" submitted to the Fourth Annual Meeting of the Inter-American Economic and Social Council, which was held in Buenos Aires in March 1966, contains the supporting data for a request to the Heads of State to reaffirm their decision to implement the Ten Year Public Health Program contained in Resolution A.2 of the Charter. Although much has already been done, there is still much to do if the goals of the Alliance for Progress are to be reached. Nevertheless, much valuable experience has been gained, experience that is essential if a greater yield is to be obtained from the available human, material and financial resources and from those that must be invested if further progress is to be made. All this adds up to the fact that since the Alliance for Progress the Americas have truly achieved self-consciousness.

4. The fourth suggestion deals essentially with a decision which we should like the Presidents of the American Republics to make and which would serve as a basis for a rule, a practice to be followed, whenever a development project is being prepared in the Americas. Indeed, we do not believe it is necessary to argue about the significance of death, disease, and disability for production and productivity, whatever the nature of the economic development program. Furthermore, in our opinion, there is little point in discussing the significance of improving the physical environment for the exploitation of natural resources. Similar arguments also occur when industrialization, agricultural development, and urbanization are discussed. Obviously, consideration must be given to health as a social service in the pre-investment phase of any project involving the above-mentioned activities. This is not being done today. Hence our suggestion that the Heads of State establish it as a principle, a norm which, as we said, will lead to its becoming a practice in government, international credit agencies, and the international organizations that advise them.

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Dr. José A. Mora

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18 January 1967

I should like to again express to you, Sir, our thanks for your sympathetic understanding of the steps I have taken, in the name of the XVII Pan American Sanitary Conference, with reference to the meeting of the Heads of State. If this letter meets with your agreement, I should be grateful if you would transmit it to the Committee which is preparing the agenda for that meeting.

Sincerely yours,

Abraham Horwitz  
Director

Encls.

CE56/19 (Eng.)

ANNEX 3

"COMMUNITY WATER SUPPLIES  
A Discussion of Financing"



PROPOSAL  
FOR  
IMPROVING THE WELL-BEING OF RURAL PEOPLES

COMMUNITY WATER SUPPLIES  
A Discussion of Financing

PAN AMERICAN HEALTH ORGANIZATION

Washington, D.C.

January, 1967

## RURAL COMMUNITY WATER SUPPLIES

### A Discussion of Financing

Domestic water supplies are essential to the health, social and economic well-being of peoples. Such supplies are basic to the program of reducing infant mortality and extending life expectancy.

The shape of the future rural habitat in Latin America can no more be left to chance than can the urban habitat. The satisfactory economic and social development of a country depends upon providing the same kind of attention to the more basic problems of man in his rural environment as we are now promoting for the more sophisticated problems of man in his cities. We have not been providing this kind of balanced attention. Consequently, a backlog of need has accumulated in the rural areas. This is clearly true in the case of water supply for rural communities. To take care of the rural water-supply backlog and bring the situation into reasonable balance by the end of the Alliance-for-Progress Decade, special new measures must be taken.

This document discusses background --including progress toward the rural water-supply goals established in the Charter of Punta del Este. It points out the need for a more concerted effort on the Rural Water Program, and it proposes a funding mechanism to support a system of national revolving funds. The latter funds will be used, first, for loans to qualifying communities to construct water systems and, subsequently (after becoming self-sustaining), for related community improvements.

The rural water proposal has three key objectives: First to provide impetus to the program and accelerate construction over the second half of the Alliance Decade; second, to strengthen community organization and to develop more fully the self-help potential; and, third, to establish, in each country, a self-sustaining funding mechanism.

One of the most encouraging aspects of the rural water-supply program is the enthusiasm and realism with which the communities have faced up to their responsibilities. The people have come to recognize the value of a domestic water supply. They want --and are willing to pay for-- water service.

## Introduction

The Governments of Latin America established for themselves, in the Charter of Punta del Este, a highly commendable goal --water services to 70% of the urban and 50% of the rural population. This action indicates the firm determination of Governments to improve the well-being of their peoples. Remarkable progress toward meeting these goals has been made. At mid-decade, progress toward the goal for urban areas is on schedule. The rural program, however, is less advanced.

In Latin America, the rural-urban migration is taking place much faster than urban employment opportunities are being created. This is unfortunate from the standpoint of both rural and urban development. One of the ways in which this rural-urban population flow may be diminished, and the agricultural economy thereby strengthened, is by providing more of the amenities of urban living for rural communities. Foremost among such amenities are safe, convenient water-supply services.

The conviction remains that water supplies can be provided, as set forth in the Charter. It has become apparent, nevertheless, that the nature and magnitude of the effort must be changed significantly --and soon-- if the goal for rural communities is to be realized. There must be great willingness on the part of all concerned to develop new administrative and financing arrangements; to revise standards; to encourage innovation; and to make the hard choices necessary to accelerate the present effort.

## Background

In 1963, PAHO completed a study of rural water-supply needs in Latin America and developed a proposal for action --including the establishment of a special fund for rural well-being. The PAHO plan featured the creation of a national revolving fund in each country which was to be used, first, for water-supply loans to communities, but which was also, in time, to assist in the financing of other rural environmental improvements. Such loans to communities were to be conditioned on full community participation and self help; the establishment of local water co-ops with sound management; and assured repayment to the national revolving fund. The program's objectives were to meet the goals established in the Charter of Punta del Este.

Support of the concepts advanced in the PAHO plan was given by its Governing Bodies (Directing Council Resolution XX, 23 September 1963). The PAHO proposal was also considered favorably by the Second Annual Meeting of IA-ECOSOC in São Paulo in November 1963 (Resolution XIX-M/63, at the Ministerial level). These supporting resolutions are appended.

## Current Status of Rural Water Supply

The program of providing water services in small towns and villages lags far behind similar programs for metropolitan centers. This disparity between urban and rural progress is not, of course, surprising. Logistics for providing materials and supplies, construction, management, and financing are considerably more involved in scattered rural communities. However, new techniques in community organization, new materials, improved methods of construction, better transportation --if properly applied-- should more than offset these obstacles.

Thus far in the Alliance Decade, the Governments have committed more than \$1 billion for community water supply, of which about \$175 million is for systems in rural areas, where these improvements are benefiting 15,000,000 people in some 20,000 small towns and villages. In general, communities with populations up to 2,000 are considered rural; in some countries, the figure is higher. In order to meet the goals of the Charter of Punta del Este (50% of the rural population served by 1971), water services must be provided for 40,000,000 people in some 50,000 communities within the next five years. This is an ambitious goal. It will take an ambitious effort, maximum use of our experience, and new developments to meet it.

During the past two years, PAHO has been promoting the concept of a mass, "assembly-line" method of approach to rural-community water supply --rather than the project-by-project approach formerly used.

In terms of loans for financing rural water, this concept is now being followed in eight countries. However, the concept is not followed in terms of survey, design, and construction practices.

Over the past three years, PAHO has been giving priority attention to community water-supply problems in Latin America. The Organization has been working in close collaboration with IAD, AID, UNICEF, and other agencies assisting on rural-development programs. This composite effort --particularly the loan assistance by IADB-- has made possible the significant achievements. However, the expanding population and increasing needs of the people require more concerted effort over the second half of the Alliance-for-Progress Decade.

## Proposed Program

PAHC proposes a more concerted effort to embrace the following:

1. The establishment of a special international funding mechanism, to improve the health, social, and economic conditions in rural communities --with primary focus on providing community water supplies.
2. The international fund would be available to the Governments, on a matching basis, for the establishment of national revolving funds.

Two specific conditions would be established with regard

first, to the creation of a national revolving fund (including international funds); and, second, for making loans from the national revolving fund to qualifying communities.

1. Conditions for eligibility for a loan from the international fund for setting up a national revolving fund.
  - a. Establishment of a national revolving fund.
  - b. Existence of a duly authorized agency capable of administering the fund, and preferably with experience in the design, construction, operation, and maintenance of the facilities to be financed by the revolving fund. If the agency does not have such experience, there should be a well-defined relationship with an organization which does.
  - c. Agreement by the national Government to match the money loaned by the international funding source. The national revolving fund would be comprised of both an international loan (or grant) and the national funds.
  - d. A plan of operation embracing the principle of construction by groups of communities --using "assembly-line" methods-- with types of systems and design capacities consistent with the economics of the areas served.

In terms of loans for financing rural water, this concept is now being followed in eight countries. However, the concept is not followed in terms of survey, design, and construction practices.

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  - a. Establishment of a national revolving fund.
  - b. Existence of a duly authorized agency capable of administering the fund, and preferably with experience in the design, construction, operation, and maintenance of the facilities to be financed by the revolving fund. If the agency does not have such experience, there should be a well-defined relationship with an organization which does.
  - c. Agreement by the national Government to match the money loaned by the international funding source. The national revolving fund would be comprised of both an international loan (or grant) and the national funds.
  - d. A plan of operation embracing the principle of construction by groups of communities --using "assembly-line" methods-- with types of systems and design capacities consistent with the economics of the areas served.

- e. International loans to support the national revolving funds should be at minimum interest and maximum years for repayment (with an appropriate grace period).
  - f. The national revolving fund to make loans to qualifying communities to cover a percentage of the cost of the individual system, such percentage to be determined by the national revolving-fund agency, in consultation with the community concerned.
  - g. The national revolving fund to loan money for a project on the basis that such loan would be repaid, within a stipulated period of time, at a determined rate of interest.
2. Criteria for the selection of communities eligible to receive loans from the national revolving fund:
- a. Existence of an appropriately constituted local cooperative, or similar organization, suitably organized to operate, maintain, and manage the system efficiently and authorized to establish water rates and collect charges.
  - b. Establishment of realistic water rates by the community for the consumers to be served by the system. Unless otherwise provided by the Government, such rates must cover loan repayment to the national revolving fund and costs for operation and maintenance.
  - c. Demonstration of the community's ability to:
    - (1) Finance a percentage of the project cost, such percentage to be agreed upon jointly with the national revolving-fund agency;
    - (2) Repayment to the national revolving fund of the loan (with interest) within a stipulated time period.

## Discussion of the Plan

This proposal does not include a specific method of establishing the Special International Fund. General support for establishing such a fund will depend largely on acceptance of the plan by the Governments and their assurance of providing the national financial and administrative resources to carry out the plan. There are three possibilities for international funding:

- a. Use of line credits for loans from existing international lending agencies (IADB, AID, etc.);
- b. Quota contributions from the Governments on the formula basis established for regular budgets;
- c. Voluntary contributions from Governments.

While the scope of the plan is to be continent-wide in its ultimate application, it is unrealistic to anticipate that all countries would start simultaneously. The status of the rural water program, at present, is such that some 15 countries could adjust quickly to this accelerated program and apply for loan funds. The program would concentrate on the self-help concept, on community organization, and on sound management procedures.

As its name indicates, the proposed revolving fund would be replenished primarily, or entirely, by payments from the benefiting communities upon completion of project construction. Prime emphasis would be placed on water revenues received as a means of repaying loans from local funds; however, other sources

for local repayment would not be overlooked, if special conditions favored their use. The revolving fund is the key element of the program, since it would, in effect, be an instrument of social policy, designed to mobilize community resources on a self-sustaining basis.

Contributions to the revolving funds, in the form of payments from provincial and national appropriations (in addition to such direct subsidization of construction as might be made), would not be ruled out; but, again, emphasis should be on making the water systems self-sustaining enterprises. Under normal terms of international development-loan contracts, national Governments would assume responsibility for repayment. National Governments should consider repayment of the international loan from current revenues. This would leave intact the revolving-fund mechanism and would shorten the time for the fund to become self-sustaining.

Each participating country would have to make appropriate legal and administrative arrangements to establish the national revolving fund. Financial administration could be entrusted to a national bank, an existing water authority, or a ministry; or an entirely new and separate administrative entity might be required by local conditions.

The replenishment of revolving funds --which permits successive series of rural welfare projects-- understandably will vary according to the repayment schedules established by the respective countries. Community repayment to the revolving fund normally will begin soon after the system is installed. To be successful, the system should have a high percentage of house connections. Accordingly, house connections should be made as the system is installed, either as a part of community participation or through the community loan. The interest rate charged to the community on loans from the revolving fund is a key factor in the growth of the fund. This rate is likely to vary among countries and even within a country, to take into account widely divergent economic conditions.

To compensate for inflation, water rates would be expressed as a percentage of the local area's minimum-wage scale, or geared to changes in consumer-price levels. Water rates for low-income customers should be less than 5% of family income.

#### Notations on Revolving Fund

The revolving fund is a special fund established for specific purposes. To ensure fulfillment of these purposes, provisions for the protection of the fund should be made at the time the fund is established.

Obviously, in order to succeed, the revolving fund must be assured of loan repayments, plus interest. The period of repayment of loans by communities, as well as the interest rate, must be in balance with the economics of the communities. Where international

loans are involved the amortization period, and the interest rate for such loans, must be based on terms which will support the success of the revolving-fund system.

It is impractical to expect the revolving fund to be implemented fully the first year. There will be delays in establishing administrative procedures and policies; in developing construction plans; and in mobilizing manpower and materials. Accordingly, in the initial stages, the number of loans to communities will be fewer than the full potential of the revolving fund. These delays will affect the volume of repayments to the revolving fund in the early years.

The concept of a national revolving-fund mechanism is not new as a means of financing public improvements. However, the use of such a mechanism for financing rural-water supplies will be new to most countries in Latin America. Accordingly, it is impractical to predict the volume of international-loan demand which might be made by the Governments. During the first five years, such loan requests --in total-- would, in all likelihood, average less than \$40 million per year.

To establish and administer a national revolving-fund mechanism will be a major task for most countries. Should a Government so request, it might be practical for an international lending agency to assist in organizing and administering the revolving fund --at least during the initial stages.

Table I and its accompanying notations provide an example of how such a revolving fund might operate.

Explanatory Notes for Table I

1. Table I is included for purposes of illustration only. Over a five-year period annual increments of 2 million dollars (national plus international) were chosen for ease of presentation and should be varied to meet the actual situation and needs.
2. International funds shown in Column 2 may be either grants or loans. If they are loans, repayment may be made after the agreed grace period from (a) national budget funds thus leaving intact the national revolving fund as tabulated in Columns 4 and 6; (b) income derived from repayments by communities to national revolving fund, in which case the revolving fund would be depleted accordingly; (c) a combination of (a) and (b).
3. National government funds (grants) shown in Column 3 include funds from the national government or a combination of funds from the national and state governments.
4. The funds available in the national revolving fund for loans to communities (Columns 4 and 6) are composed of funds from international sources (Column 2) national government (Column 3) and repayments from the communities to the national revolving fund (Columns 5 and 7).
5. Repayments from the communities to the national revolving fund (Columns 5 and 7) are for the conditions shown in the column headings. These are based on the assumption that (a) the amounts available for loan in the national revolving fund (Columns 4 and 6) are loaned each year, and (b) that the communities benefited will maintain on schedule their repayments to the national revolving fund. Obviously, this ideal situation will not prevail. There may be delays in establishing the fund; in making loans; in completing construction; in making house connections; and developing routine payment of water rates, etc. To the extent that these occur, the amounts shown in Columns 4, 5, 6 and 7 will be reduced accordingly.
6. The size and rapidity with which the revolving fund will develop depends basically on the following financial factors:
  - (a) the conditions under which the funds are obtained to establish the national revolving fund;
  - (b) the conditions under which this money is loaned to the communities, for example:
    - (a) With amortization at 15 years-5% (Columns 4 and 5) \$2,000,000 per year over a five year period will produce

\$46 million construction and provide a \$3.2 million revolving fund after twenty years.

(b) With amortization at 25 years-5% (Columns 6 and 7) \$2,000,000 per year over a five year period will produce \$32 million construction and provide a \$2.1 million revolving fund after twenty years.

7. Amortization conditions used (15 and 25 years-5%) may be modified to fit local conditions.



TABLE I\* - NATIONAL REVOLVING FUND (NRF) - GENERAL FINANCIAL PLAN

Based on Increment of \$2 Million Program (each year for five years)

Year	International Source Funds to NRF	National Government Funds to NRF	Amortization of 100% of Cost 15 years at 5%		Amortization of 100% of Cost 25 years at 5%	
			Amount Available in NRF for Loans to Communities (2)+(3)+(5) (4)	Repayments from Communities to NRF (5)	Amount Available in NRF for Loans to Communities (2)+(3)+(7) (6)	Repayments from Communities to NRF (7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	1,000,000	1,000,000	2,000,000	-	2,000,000	-
2	1,000,000	1,000,000	2,193,000	193,000	2,142,000	142,000
3	1,000,000	1,000,000	2,405,000	405,000	2,294,000	294,000
4	1,000,000	1,000,000	2,637,000	637,000	2,457,000	457,000
5	1,000,000	1,000,000	2,891,000	891,000	2,631,000	631,000
6			1,170,000	1,170,000	818,000	818,000
7			1,283,000	1,283,000	876,000	876,000
8			1,407,000	1,407,000	938,000	938,000
9			1,543,000	1,543,000	1,005,000	1,005,000
10			1,692,000	1,692,000	1,076,000	1,076,000
11			1,855,000	1,855,000	1,152,000	1,152,000
12			2,034,000	2,034,000	1,234,000	1,234,000
13			2,230,000	2,230,000	1,322,000	1,322,000
14			2,445,000	2,445,000	1,416,000	1,416,000
15			2,681,000	2,681,000	1,517,000	1,517,000
16			2,940,000	2,940,000	1,615,000	1,615,000
17			3,031,000	3,031,000	1,730,000	1,730,000
18			3,111,000	3,111,000	1,853,000	1,853,000
19			3,179,000	3,179,000	1,980,000	1,980,000
20			3,232,000	3,232,000	2,126,000	2,126,000
Total	5,000,000	5,000,000	45,959,000	35,959,000	32,182,000	22,182,000

\* Illustration of the mechanics of a revolving fund under two sets of conditions. Explanatory notes on preceding page.

RESOLUTION XIX-M/63 <sup>1/</sup>

CONTINENT-WIDE PROGRAM OF RURAL ENVIRONMENTAL HEALTH AND WELL-BEING

WHEREAS:

The document on the establishment of a continent-wide program of rural environmental health and well-being (OEA/Ser.H/X.4, CIES/341) has been examined;

Rural environmental health is important to the economic and social development of the rural population of the Americas;

One of the objectives set forth in the Charter of Punta del Este was to supply potable water and sewage-disposal services for at least 50 per cent of the rural population during the present decade;

Resolution A-11 of the First Annual Meeting of the Inter-American Economic and Social Council at the Ministerial Level recognized the need to intensify efforts to improve living conditions in rural areas and to obtain international credits for the development of programs for this purpose;

The program received firm support at the Meeting at the Ministerial Level of the Task Force on Health (Washington, April 1963), the Eighth Meeting of Ministers of Health of Central America and Panama (San José, July-August 1963) and the XIV Meeting of the Directing Council of the Pan American Health Organization (Washington, September 1963); and

Due account has been taken of the recommendations contained in the Report of Special Committee VII (Health Group) of the Inter-American Economic and Social Council (San Jose, August 1963),

The second Annual Meeting of the Inter-American Economic and Social Council at the Ministerial Level

RESOLVES:

1. To recognize the importance of the problem of supplying potable water in rural environments, within the context of over-all rural development, and to recommend to the member states that they assign high priority to programs aimed at solving these problems.

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<sup>1/</sup> Pages 32-33 of the Final Report of the Second Annual Meeting of the IA-ECOSOC at the Ministerial Level, Document OEA/Ser.H/X.4, CIES/580, Rev. of 6 Dec. 1963.

RESOLUTION XIX-M/63 (Cont'd)

2. To recognize the necessity of developing the Continent-wide Program of Rural Environmental Health and Well-being along the lines set out in Document OEA/Ser.H/X.4, CIES/341, based on the participation of the communities, the establishment of national revolving funds, and contributions of external funds, with a view to achieving the objectives set forth in Resolution A-2 appended to the Charter of Punta del Este.

3. To suggest that, after consultation with the interested countries, the Inter-American Development Bank undertake the responsibility for the administration of external financial resources, and, that the Pan American Sanitary Bureau undertake the responsibility for supplying technical advice to the governments at each stage of the program, and to suggest to both these organizations, that, with the cooperation of other interested agencies they study and establish appropriate procedures and relations that will make it possible to begin the program, it being understood that each government shall choose the appropriate time to begin the program, in accordance with the socioeconomic situation of the respective country, bearing in mind, in all cases, the social capacity for absorption of this type of investment of the communities that are to benefit.

4. To suggest to the Pan American Health Organization the appointment, in collaboration with the Inter-American Development Bank, of technical committees, to provide them with advisory services on financing, organization, community motivation, and other aspects of the program.

5. To recommend to the governments of the member states that they establish, and make proper legal and financial provision for, the most adequate and competent organization to administer the program at the national level.

6. To recommend to the governments that they adopt the necessary financial measures that will enable them to select and organize the communities for beginning this program as soon as possible.

RESOLUTION XX <sup>1/</sup>

ESTABLISHMENT OF A RURAL WELFARE FUND

THE DIRECTING COUNCIL,

Having examined the report of the Director on the establishment of a rural welfare fund (Document CD14/23);

Bearing in mind the importance of environmental sanitation to the health and social and economic development of the rural population of the Americas and the target established in the Charter of Punta del Este of supplying water and sewage disposal services to at least fifty per cent of the rural population in the decade;

Mindful of Resolution A-11 of the First Annual Meeting of the Inter-American Economic and Social Council at the Ministerial Level (Mexico City, November 1962) which recognized the need to intensify efforts to improve living conditions in rural areas and to obtain international credits to develop programs for that purpose, and

Noting the support for such programs expressed by the Task Force on Health at the Ministerial Level (Washington, D.C., April 1963), by Resolutions IV and XIII of the 48th Meeting of the Executive Committee (Washington, D.C., April 1963), by the VIII Meeting of Ministers of Health of Central America and Panama (San Jose, July-August 1963), and by Committee VI of the Inter-American Economic and Social Council (San Jose, August 1963), and in view of the favorable opinion and the unanimous approval of the Members of the Council at its XIV Meeting,

RESOLVES:

1. To approve the rural health program along the general lines described in Document CD14/23, and based on community participation, establishment of national revolving funds, and the need for international capital contributions.

<sup>1/</sup> XIV Meeting of the Directing Council of PAHO, Document CD14/40 (Eng.) pp. 28 and 29. (Resolution approved at the tenth plenary session, 23 September 1963)

RESOLUTION XX (Cont'd)

2. To urge the Director to seek assistance from all possible sources for implementation and financing the program, including the Governments and the international development and credit institutions.

3. To recommend that the Director appoint a Technical Committee to give advice on financing, community organization and motivation, and other aspects of the program.

4. To recommend that Member Countries establish competent organizations to take charge of the execution of the national programs.

ANNEX 4

"THE DEVELOPMENT OF BIOMEDICAL SCIENCE  
AND EDUCATION IN LATIN AMERICA"

THE DEVELOPMENT OF BIOMEDICAL SCIENCE AND EDUCATION  
IN LATIN AMERICA

DEFINITION AND ROLE OF MULTINATIONAL CENTERS

PAN AMERICAN HEALTH ORGANIZATION  
Washington, D.C.

January 1967

Original: English  
RES 6/1

## I. General Premises

1. Biomedical science and technology, including preventive medicine and public health, play a central role in increasing the productive capacity of the population and in achieving a better balance between the expansion of population and the expansion of food supplies.
2. Biomedical science and advanced education in Latin America are inadequate in quality and quantity and are grossly underfinanced.
3. Specific measures to strengthen biomedical sciences must be an important part of general plans for the application of science and technology to social and economic development.

## II. Unique Aspects of Biomedical Science in Latin America

The biomedical sciences in Latin America have the following characteristics:

1. The biomedical sciences deal essentially with the phenomena of life. It is generally agreed that the next decades will witness developments in these sciences whose significance for mankind may well transcend that of the exploration of the atomic nucleus during the past two decades. Any region of the world that cannot understand and participate in these developments will not be able to benefit fully from them.
2. The biomedical sciences encompass a wide range of disciplines and techniques, from molecular biology to the social biology of population groups. Although the biomedical sciences require increasingly complex and expensive experiments, both in the laboratory and with large population groups, what is needed at present is not large centralized laboratories but more effective collaboration among smaller laboratories.



3. For historical reasons the biomedical sciences are more fully developed than any other field of science in Latin America. There are more internationally recognized scientists and, even though many of them must operate in relative poverty, more outstanding institutions in this field than in any other in Latin America. This situation is the consequence of the deliberate efforts, over the past three decades, of both national governments and private groups, most notably the great private foundations of the United States, to build up outstanding centers for advanced teaching and research. Other fields of science that have not been so fully developed may well be at a stage where the establishment of new centers would be most effective.

4. Biomedical science is better organized nationally and internationally than any other field of science in Latin America.

5. The objectives, organization and limits of multinational collaboration in this field have been explored more extensively and in greater detail than in any other. (See Attachment A for a list of studies on this subject that have been undertaken in the past few years under the auspices of the Pan American Health Organization).

### III. Common Characteristics of Science and Technology in Latin America

A sound plan for the development of teaching and research in fields related to health and medicine must take into account not only the unique characteristics mentioned above but also those they have in common with the other sciences. One marked feature of the sciences in general has been their strong development in many countries in the past 20 years. There are, however, some obstacles that must still be overcome, such as:

1. Less than full understanding in the higher levels of government of the indispensable role of science and technology in economic and social development.
2. Not enough adequately remunerated full-time university positions combining research and teaching.
3. An atmosphere inimical to investigation in many universities.
4. Inadequate attention by scientists to important social and national problems.
5. Incomplete communication between Latin American educators and scientists and between scientists and national policy makers.
6. A general tendency to produce too many poorly trained persons in the professions (law, engineering, and medicine, for example) and too few highly trained persons.
7. Advanced teaching and research are sometimes carried on in an atmosphere characterized by instability of leadership and of support.

#### IV. The Role of National and Multinational Efforts in the Health Sciences

Most of the answers to the problems facing medical science and education will be found in the countries themselves. Most of the resources will be national. Most of the decisions affecting the contributions which medicine can make to development will be taken by national governments. However, international efforts will be needed to help these national efforts bear fruit.

1. In most countries resources are inadequate and must therefore be supplemented. Material resources require the investment of funds; human resources require the help of outstanding leaders.

2. Most institutions for advanced teaching and research are specialized and relatively small. International collaboration is needed to help them become more effective.
3. An international standard of quality needs to be established as a goal for national efforts.
4. International collaboration can enhance the prestige of national institutions by recognizing them and by calling the quality of their teachers and scientists to the attention of national authorities.
5. International collaboration can help give institutional stability to a field of teaching and research and thus offset the instability of individual departments and laboratories.

From this statement may be derived some observations relevant to the design of a sound plan:

1. Multinational collaboration should be concentrated on advanced levels but should be designed to improve indirectly undergraduate teaching of physicians.
2. The establishment of new institutions is not so high a priority as the better use of existing skills and facilities.
3. The construction of new facilities is not so urgent as the improvement of existing facilities through renovation and the provision of equipment.
4. The establishment or strengthening of organizations devoted solely to research or solely to teaching should be avoided.
5. In general, all international efforts should be designed to reduce incentives to migration to more advanced countries, and arrangements that involve the permanent transfer of highly competent teachers and investigators from their home institutions should be avoided.

This analysis relates solely to advanced teaching and research in the sciences related to health. Some of the conclusions may be relevant to other areas of science, but some may be irrelevant or misleading.

V. Aims of Multinational Collaboration in the Health Sciences

In the last few years the PAHO Advisory Committee on Medical Research and special study groups have examined the characteristics and needs of the health sciences. In the light of these studies PAHO has developed a plan covering the aims, functions, organization and financing of multinational efforts in health research and education. It proposes that, in each discipline related to health, the outstanding centers for advanced teaching and research in Latin America become formally associated so as to attain the following aims:

- a. Increase the number of highly trained teachers and investigators by linking research and training at the graduate level. Enable teachers and scientists to pursue their work at an advanced level in Latin America and thus reduce incentives to migration.
- b. Assess the capability of different laboratories, departments, and institutes, plan the specialization of function and equipment, and the rotation of advanced students and of senior investigators among laboratories so as to ensure that effective use is made of the existing material and human resources.
- c. Secure international recognition of the quality of selected centers and thus enlist national support for research and training; stimulate Latin American scientists to plan for the development of science and technology in Latin America.

d. Provide, ultimately for every center that aspires to excellence, organized assistance including a system for the exchange of teachers and investigators so that outstanding talent is made available to an entire discipline in Latin America.

VI. Organization and Financing

The Pan American Health Organization is prepared to present specific plans covering the organization and financing of multinational collaboration for teaching and research in the health sciences.

a) Organization

The general policy to be followed in organizing collaboration will be to amalgamate into centers under the auspices of PAHO a number of institutions of recognized standing in a given field of science. The component institutions of the centers will usually be situated in different countries, although they may all be in a single country. The directors of the centers will constitute a "board of directors" and will be responsible for making proposals on such matters as joint curriculum construction, visits by outstanding investigators and teachers, collaborative research, exchange of students, and use of expensive equipment.

The PAHO Advisory Committee on Medical Research will review plans and assess their execution. (The functions of the Committee will be expanded to include the fostering of education at the graduate level).

Although collaborative efforts would be the predominant mode of organization, entirely new centers might be needed to deal with specific problems. In this connection, the highly successful Institute of Nutrition of Central America and Panama comes naturally to mind as a precedent.

However, for the immediate future the only new organization envisaged is in the field of communication of information (see Section VII).

b) Financing

Financing would primarily be by the countries concerned, through their basic support of the collaborating institutions. In the life sciences most of the investment for effective multinational collaboration is already being made by the countries themselves in the form of salaries of professors, support of students, provision of research and teaching space, and supply of basic equipment. The supplementary funds required from external sources to realize the potentialities of international collaboration would be relatively small, approximately US\$500,000 per year per field.

VII. Initial Steps

The earlier work of PAHO on plans for multinational collaboration provides a solid base for the initial development of specific proposals in a number of fields. The existing plans will be brought up to date, modified as necessary, and reduced to specific proposals in the next few months. The following are illustrative of different but complementary approaches.

1. Biostatistics and Demography

The basic facts about the characteristics of the population and disease patterns in Latin America are not known. Without these facts health programs and the general strategy for population growth cannot be soundly planned. Every medical school in Latin America should teach demography and health statistics and have at least a modest research

program in this field, but few do. Existing strong departments in medical schools will serve as centers for the expansion of teaching and research in this area.

## 2. Pathology

Pathology is not only a basic scientific discipline but also a service indispensable to the practice of medicine, to the efficient operation of hospitals, and to the study of disease in individuals and in population groups. Pathology has been relatively weak in Latin America, although some points of strength do exist. It is proposed to strengthen and combine departments of pathology, such as those in Cali, Medellin, and Bogotá, into a center where students from other countries can study pathology at an advanced level. Professors from other countries would be brought to Colombia, and Colombian professors would teach in centers elsewhere. As soon as possible - and perhaps from the outset - other strong departments such as those in Mexico City, would join the program.

The example of pathology indicates that, in certain circumstances, a set of laboratories in a single country may be of such outstanding quality that they are clearly the indicated site for multinational effort. In such instances, the international aspect of the undertaking would be a firm agreement by the selected institutions to accept students from other countries, provide other countries with teachers, etc.

## 3. Viral Diseases in Latin America

The field of virology is of particular significance to Latin America because it encompasses the study of a group of diseases of great importance in Latin American countries (particularly the arthropod-borne virus diseases)

and borders upon areas as diverse as genetics, immunology, and cancer.

The approach in this field would be to link selected laboratories, which have already been identified in a number of countries (Bogotá and Cali, Colombia; University of Córdoba, Argentina; Instituto Adolfo Lutz, São Paulo, and the Virus Laboratory in Belém, Brazil). In this regard, the PAHO experts noted in 1962 that, "While the number of research groups concerned with arthropod-borne viruses in South America is limited, these reviewers do not feel that there is an urgent need for a program to accelerate development of additional new groups or organizations. It is undoubtedly of more importance to encourage the continuation of interests of the present groups, to assist them in obtaining adequate financial and administrative support and stability from their parent organizations, and to assure adequate training and reference center support for the present and future personnel of these units."

4. Physiology, Pharmacology, and Biochemistry

Physiology, pharmacology, and biochemistry comprise a tightly linked group of sciences basic to medicine and at the same time an important area of fundamental science relating to all biological processes. This area of science has been highly developed in a number of specialized centers in Latin America, but is at a rudimentary level in others and in many universities and faculties of medicine. Laboratories and departments in Mexico, Chile, Brazil, and Argentina are prepared to collaborate in an effort to strengthen the entire field in Latin America.

5. Regional Medical Library Center

Both advanced teaching and research depend upon effective transfer of information. Latin America is deficient in this area, both because of low levels of investment and because of the persistence of obsolete



technology. PAHO proposes to establish a Latin American Regional Library whose functions will be to (a) provide Latin American teachers and investigators with prompt and inexpensive access to the world literature in medicine and the health sciences, (b) train persons in modern library techniques, (c) provide Latin America with a point of contact with other world centers of medical literature, and (d) explore means of making the dissemination of information cheaper, faster, and more responsive to the needs of users.

ATTACHMENT A

PAHO PLANNING FOR MULTINATIONAL COLLABORATION IN THE HEALTH SCIENCES  
(1962-1966)

The Pan American Health Organization has carried on both general and specific studies of multinational collaboration in the health sciences. Earlier specific studies led to these general findings and recommendations:

1. Migration of Health Personnel, Scientists and Engineers from Latin America. Scientific Publication No. 142. September 1966. Washington, D.C. 118 pages.

"High priority should be given to the reinforcement of existing strength in medicine. In general, investments in selected existing centers of high quality - organizations already in being that have good leadership, facilities, equipment, and students - will yield a greater return in terms of the training and quality of research than investments in new centers."

"In general, and as a long-range objective, emphasis should be on strengthening the areas of excellence - departments, faculties, research groups, institutes, or whatever they may be - that have a strong educational component. This, as a rule, means areas associated with universities. Some universities are so archaic, badly organized, and poorly staffed, however, that they fall far short of the ideal institution combining teaching and research. In such cases it is necessary to consider the strengthening of nonuniversity points of excellence." (p. 48).

2. Science Policy in Latin America, Substance, Structure and Processes. Scientific Publication No. 119. March 1966. Washington, D.C. 70 pages.

"The principle of the intellectual common market has been recognized and enunciated by informed and influential groups. It was for example, the subject of a specific recommendation by the OAS Science Advisory Committee at its first meeting in 1958. The Committee proposed the "expansion of the support and activities of a relatively modest number of existing research institutes, with a view to using them as Regional Centers of research on an increasingly international basis."\* In 1959 the U.S. National Commission for UNESCO proposed that at least six regional research centers should be established, including centers for biophysics, biochemistry, and microbiology.\*\* First steps have been taken in the direction recommended by these reports. For example the Latin American Society for the Physiological Sciences has served as the agent to coordinate ten laboratories, and the Pan American Federation of Associations of Medical Schools has strongly urged this approach. In fact, all the strong centers of research in Latin America attract and welcome students and mature scientists." (p. 45).

Specific surveys leading to the general recommendations were:

1. Program for Advanced Education and Research in Pathology. (Internal Document) 1966.
2. Immunology in Latin America, A Survey. (Ref. RES 4/7).  
24 May 1965. Washington, D.C. 59 pages.

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\* The Organization of American States and the Development of Science, Final Report of the OAS Advisory Committee on Science Development. Pan American Union. Washington, D.C. 1959.

\*\* National Science Foundation, Science in the Americas: Papers Presented at the Scientific Section of the 7th National Conference of the U.S. National Commission for UNESCO, Denver, Colorado, 1959.

3. Recommendations for the Establishment in Mexico of a PAHO/WHO Research and Training Center in Immunology. (Ref: RES 5/1). 25 October 1965. Washington, D.C. 14 pages.

4. Research and Research Needs in Arthropod-borne Virus Diseases in Latin America. (Ref: RES 1/9 ) 28 May 1962. Washington, D.C. 46 pages.

5. Prospects for Investigations of Viral Respiratory Illnesses in Latin America. (Ref: RES 2/2). 10 April 1963. Washington, D.C. 79 pages.

6. A Program for the Development of Permanent Institutional Resources for Research Training and for Exchange of Research Personnel in the Health Sciences in Latin America. (PAHO internal document). October 11, 1962.

7. Proposed Regional Medical Library Center for Latin America. (Ref. RES 4/12). 9 June 1965. Washington, D.C. 46 pages.