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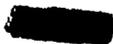
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INTERNATIONAL COOPERATION IN
HEALTH AND SANITATION PROGRAMS

A Review of the Contributions of the United States, With Particular
Emphasis on the U.S. Government, for International Cooperation Year

Department of Health, Education and Welfare
and
Agency for International Development, Department of State
Washington, D. C.

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I. INTRODUCTION

International cooperation in health has a long history, filled with many brilliant achievements as well as quiet, unrelenting struggle. In spite of this record of past accomplishment the problems seem to multiply more rapidly than the solutions. It is clear that the need for a world-wide, cooperative effort to improve the health of the world's people has never been more important than it is today.

The health of the people of the world is not what it could or should be. Access to services which permit the achievement of good health is now accepted throughout the world as a basic human right. A right which cannot be limited to the fortunate few, but one which must be shared by all the world's people.

Basic to the search for better health is the need to enhance living standards for people throughout the world. Economic development, universal education, the moderating of rapid rates of population growth, the provision of adequate food supply, decent housing, opportunity for employment are all factors that interrelate with our attempts to seek better health.

Health is not only an end in itself, but is also one of the essential factors in man's quest for fulfillment--to ensure his ability to work productively, to create, and to seek his happiness. In that sense, health takes its place as one of many means to an end, and must be closely related to the other important factors, such as education,

that contribute to the achievement of man's goals.

The state of the world's health is determined by, and in turn has an effect on, economic development and productivity, population growth rates, food supplies, level of education, social and cultural factors as well as psychological well-being. These factors, inter-related and inter-active, work together in a reciprocal fashion to affect the health of people around the world.

It is important to note that, along with the increasing organizational complexity of international health program mechanisms, there has been a corresponding sophistication in philosophical attitudes toward health. From exclusive preoccupation with pestilential disease, the health worker has moved to concern himself with health administration and planning, health training, health education, medical research, nutrition, family planning, education, community organization, behavioral science and economics.

This can clearly be seen in the striking definition of health given in the Preamble to the Constitution of the World Health Organization: "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease and infirmity." Although there may be criticisms of such a definition, it is obvious that we have come a long way from the statements of earlier sanitary conferences, where the control and quarantine of infectious diseases were the only considerations.

In this broad context, workers in many fields--engineers, industrialists, farmers, economists, employers, labor leaders, politicians,

educators, and social scientists, as well as the traditional health professionals--have important contributions to make to improving the people's health.

The present state of world health can be assessed in purely medical terms, as is traditional. From this viewpoint, the Director-General of the World Health Organization has recently stated that the control of communicable diseases is still the most important challenge facing mankind today. He added, ". . . the quarantinable diseases, which many people think of as scourges of the past, are still daily realities."

The incidence, or number of cases, of many communicable diseases is still large. Malaria continues as a threat to many areas of the world, while cholera, smallpox, and plague take a heavy toll of lives every year. Schistosomiasis is an increasingly serious world problem with the development of irrigation in tropical and subtropical regions. Tuberculosis and leprosy are among the most widespread infectious diseases in the world today. Food and water-borne diseases of many kinds threaten lives everywhere. Syphilis and gonorrhoea are on the rise in many countries, including the United States.

The striking thing about today's world is the number of people who are being affected by diseases for which there are known, effective methods of prevention and control. But the communicable and infectious diseases are not the entire picture. The problems related to rapid rates of population growth, the widespread malnutrition in preschool

children, the effects of environmental pollution, the problems of mental health and retardation, and many other matters are of increasing importance throughout the world. In addition, chronic diseases are of greater significance. Here the methods of control are not entirely known, or are treatment and rehabilitation, rather than preventive, approaches.

In considering these complicated problems, at the very frontiers of modern public health and medical practice, we again must contend with the problems of inadequate resources. Expanded research and research training efforts are needed, control mechanisms must be built and staffed--these methods of attack have already started in some of the developed countries.

The problems here, as with the problems of communicable disease, depend for their solution upon the marshalling of forces--political and economic forces, in support of health forces--in a united effort.

The attack on communicable diseases, which can be made through known, effective control measures, depends for its success on the commitment we make to delivering these control measures wherever they are needed. Where chronic diseases, mental diseases, and the environmental effects of urbanizations and industrialization are of concern, we must find new methods to meet our new problems. This means more research, more imaginative schemes of administration and organization of health services, and more cooperation among the many influential forces.

The unprecedented growth in world population poses unprecedented problems for the future of mankind. The high rates of population growth now occurring in many countries, particularly in the less developed areas of the world, impede social and economic development, threaten political stability and may even jeopardize man's search for a lasting peace.

A variety of studies have revealed a number of problems which the present rapid rates of population growth are either causing or are contributing to, especially among the poor and uneducated. These include high rates of infant morbidity and mortality, increased maternal mortality, disorganization of family life, overcrowded housing, decreased opportunity for education and employment and a lower standard of living. The rapid growth in population is placing other strains on our society in the form of air and water pollution, the breakdown of mass transportation in urban areas, overcrowding, the depletion of precious natural resources, and the destruction of needed recreational areas and open spaces.

Public concern with the problems of population growth has tended to focus on the relation between the number of people and the supply of food. In the less developed areas as a whole, food production has barely kept pace with population growth, and in some areas food production per capita has actually declined. The Food and Agriculture Organization has estimated that world food production will have to increase at least threefold by the end of the century to provide an

adequate diet for the world's increased numbers. Already in many areas of the world infant and preschool aged child malnutrition is the number one health problem.

Against this background of malnutrition, rapid rates of population growth and widespread preventible or controlable communicable disease, there is much more that can be done through improved international cooperation. The present supply of health manpower is far below that required to achieve even minimum objectives. Health and medical facilities for research, training and service are in desperately short supply. The spread of communicable diseases, for which there are known and effective control measures, results in an unnecessary burden, causing misery or death, for millions. The need for more effective means of producing, distributing, and utilizing the world's food supply grows more urgent daily. Large scale programs of health education are required to permit people to more effectively help themselves. Research into the causes of disease and the search for measures for prevention, cure and rehabilitation must be continued and expanded. Money alone will not solve any of these problems, but if they are to be dealt with in realistic terms the rich nations must provide more adequate means to permit the poor nations to lift the current burden imposed by disease, malnutrition, poverty and ignorance.

The United States, not only its government, but all segments of society, can make an effective and lasting contribution to the betterment of world health. In the future, as in the past, the effort will

require close cooperation with other nations and with international organizations.

This monograph presents a review of past efforts and present programs supported by the United States in international cooperation in health. This review focuses on the programs of the United States Government, but it does include a brief description of the remarkable number of agencies, organizations, institutions and departments involved directly and indirectly in programs of international cooperation in public health, medical care, health manpower development, rehabilitation and research in the private sector. No attempt is made in this document to analyze the present or past efforts in any depth. This is rather a descriptive treatment, which has formed the basis for a series of more detailed studies which are now in progress in cooperation with the U. S. Public Health Service, several Schools of Public Health, the Medical College of Virginia, the Rockefeller Foundation, the Association of American Medical Colleges, and a number of individuals expert in such fields as rural health, maternal and child health, health manpower development, population studies, family welfare planning, and pre-school child nutrition.

II HISTORICAL REVIEW

The story of international cooperation for the advancement of health is a story of great interest and of much achievement. Yet it is a story too little known. The work of international health is largely a technical labor; not likely to make headlines except in some moment of emergency--and such publicity is often the result of some failure in the international control apparatus, and not some success. Therein lies another reason for the general lack of knowledge concerning international cooperation for health--its relatively successful record of control and, in some areas, eradication of disease and the causes of disease, has not gained much attention. Yet it is a story of great drama.

The story begins in the 19th century. Although for some time individual cities and states had initiated their own programs of protection against the importation of diseases across their borders, it was not until the 19th century that these attempts became joint efforts. The concept of international cooperation in health grew with the tremendous expansion of trade and world travel, and was largely aimed at preventing the movement of communicable diseases from country to country by ship.

The success of such examples of quarantine as were practiced to control the spread of cholera among pilgrims on their long journeys to Mecca helped to bring about the first international conference on quarantine in 1851. The representatives of twelve states met for six months in Paris to try to find ways to "regulate in a uniform way the quarantines

. . . in the Mediterranean." The International Sanitary Convention which was finally agreed to, and which dealt largely with measures to control spread of diseases by maritime traffic, can truly be called the beginning of the modern era of international health collaboration. The United States was not among the nations participating in the conference. During the 19th century a good many international conferences were held between governments in a number of fields. In the latter half of the century more than a dozen non-governmental international medical congresses were held.

The nineteenth century also witnessed the work of Pasteur, Koch, Snow, Lister, Finlay, Darwin and many others who were to revolutionize ideas of disease, disease causation and transmission and even man himself. With this developing scientific revolution was the spreading industrial revolution and the beginnings of the sanitary advances which sought to mitigate some of the evils of the overcrowding and the poverty that accompanied the industrialization.

Foreign aid provided by the United States began in 1793 when the people of Maryland subscribed \$13,000 to help French refugees who fled to Baltimore from Santo Domingo. In 1794, the Congress authorized \$15,000 for this refugee relief program. The funds were applied to our Revolutionary War debt to the French Republic.

The foreign aid efforts of the United States in the nineteenth century were primarily in the field of disaster relief. After a destructive earthquake in Venezuela in 1812, the U. S. Congress appropriated \$50,000 to buy and ship flour, corn and other provisions to disaster victims. During the terrible Irish famines in the 1840's and again in the years 1878-1880 the U. S. Congress authorized the use of U. S. ships to carry contributions for famine relief.

American assistance of one kind or another was recorded many times in response to natural and man-made disasters during the 19th century. For example, the epidemic of typhus in Tunis (1857-1868); the earthquakes in Peru (1808), Ecuador (1868), El Salvador (1873), Guatemala (1874), Columbia (1875), Venezuela (1875), Haiti (1875), Venezuela (1878), Japan (1880), Italy (1883); the famines in China (1877-1878), Morocco (1878), China (1883-1884), Russia (1891-1892), India (1896-1897); the floods in China (1887-1888); the volcanic eruption in Japan (1888); the war relief in France and Germany (1871).

In addition to disaster relief activities, the U. S. Government provided a limited number of technical services to other countries, at their request, in agriculture, public health, education, transportation, public works and other fields. The activities in the field of public health consisted principally of efforts to aid other governments in their efforts to control specific communicable diseases. The health officials of the U. S. Government also participated in a variety of international conferences dealing with health and sanitation problems.

In 1889 the First Conference of American States was convened to discuss methods of controlling certain epidemic diseases in the Western Hemisphere and to establish a Committee on Sanitary Regulation. In 1898 U. S. military and American Red Cross workers were fighting disease and famine in Cuba. They furnished food, provided seeds for farmers, constructed water supplies and other sanitation facilities and a special Army medical group was sent to Cuba to combat yellow fever.

In 1902, as a consequence of the Second Conference of American States, the Pan American Sanitary Bureau - the world's first international health organization - was established. This meeting was followed by a series of American Sanitary Conferences which led to the signing of the Pan American Sanitary Code in 1924, with its provision making the Pan American Sanitary Bureau the central coordinating agency of the 21 signatories.

The first International Sanitary Conference to be held in the twentieth century was the eleventh such gathering and marked a turning point in international cooperation. It was four years after the conference that one of its major proposals - the creation of an international public health office - actually came into being. On December 9, 1907, delegates from Belgium, Brazil, Egypt, France, Great Britain, Italy, Netherlands, Portugal, Russia, Spain, Switzerland and the United States of America signed the Rome Agreement for the creation, in Paris, of the Office International d'Hygiene Publique (known as The Paris Office). Although the Office was primarily European in its orientation it gradually assumed a more international character as nearly sixty countries became signatories of the Rome Agreement.

The primary function of the Office was to receive and to disseminate information of general public health interest to Member States, particularly with respect to quarantinable diseases. It published a monthly bulletin which included, among other things, laws and regulations promulgated by individual countries to protect against the spread of quarantinable diseases. The Office carried out a great deal of fruitful work before its functions were interrupted by the First World War.

After the war a health organization was established by the League of Nations. The Office resumed its functions under international agreement and at the same time cooperated with the League's Permanent Committee, serving as the Advisory Health Council of the League's Health Organization. International health activities were expanded by the two organizations but continued to place emphasis on quarantine procedures, epidemic disease control and international information exchange on communicable disease. There was a beginning interest in health problems of individual countries, such as malnutrition. With the onset of World War II the activities of these organizations came to a virtual standstill.

Private citizens in the United States, and in many other parts of the world, began to become involved in programs of international health early in the nineteenth century. The first American medical missionary efforts began about 1836 and they have continued to this day. The missionary programs have included medical care, medical education, nursing and midwifery service and training, child feeding, maternal and child health, disaster relief, rehabilitation and the provision of equipment and supplies.

The Rockefeller Foundation was the first major non-sectarian organization to provide significant technical and financial assistance to the developing nations in medicine and public health. The Foundation was also a major contributor to the Health Section of the League of Nations.

The Rockefeller Sanitary Commission was organized in 1909 and it was followed by the International Health Commission in 1913. The international health work of the Foundation contributed uniquely to the

advancement of world health. The program for the eradication of hookworm disease, which began in the Southern States of the U. S., was extended to Central and South America, the West Indies, Egypt, and a number of Asian countries. From 1916 the Rockefeller Foundation began a campaign for the eradication of yellow fever from the Americas, in which it scored an amazing success. The Foundation did not limit its activities to control and eradication of specific diseases, but also promoted local health services, professional training, and health education of the public.

In 1912 the Congress passed an Act creating the U. S. Children's Bureau, which became the first public agency in the world concerned with the broad field of child welfare. That same year a draft plan for an international child welfare bureau was adopted at the International Congress of Child Welfare. The Children's Bureau made a significant contribution to the formation of the Pan American Child Congress and it has continued to participate as the official U. S. representative. In 1955 this became a specialized conference of the Organization of American States.

The Inter-American Children's Institute had essential support from the Assistant Director of the Children's Bureau when it was founded in 1927. The Children's Bureau has continued to support the Institute and one of its staff normally participates as a member of the Directing Council (see II B - Regional Organizations).

Prior to 1940 direct cooperation between the United States and the other American Republics was on an informal basis. Contacts established through attendance at Pan American Child Congresses, Pan American Sanitary Conferences and other meetings, brought an increasing number of specialists to Washington to visit official agencies concerned with international and child health, education and child welfare.

In May 1938, the President was authorized by Congress to give scientific, technical and professional assistance to the governments of the American Republics and the Philippines. The Interdepartmental Committee on Scientific and Cultural Cooperation was established to supervise this program. The program was directed by the Assistant Secretary of State for Public Affairs and it utilized 25 Federal departments and agencies all of which were represented on the Committee. The U. S. Public Health Service carried out the technical assistance programs in health and sanitation financed by the Committee. Working closely with the Pan American Sanitary Bureau, advice and assistance was provided primarily in communicable disease control, environmental sanitation and public health training. Between 1940 and 1947 there were 44 public health experts detailed to projects in Latin America and 184 Latin Americans were given public health training in the United States. The Committee expended over \$550,000 in support of these programs. The Committee supported three health missions in Peru, Paraguay and Iran between 1948 - 1951. The Committee was abolished as large scale technical assistance programs were developed after the Second World War.

The Second World War produced not only the massive Lend-Lease Program which totalled approximately \$40 billion by the end of 1945, but it also led to the establishment, within the Office of the Coordinator of Inter-American Affairs, of a government corporation to coordinate and administer bilateral programs of technical cooperation between the United States and Latin American governments. The program was initiated in 1942 and was limited to countries in Latin America providing strategic materials to the United States, resisting the Axis or aiding the Allies. The organization had two major facets, a coordinating Washington office known as the Institute of Inter-American Affairs (IIAA) and a cooperative unit in the host country to carry out the programs. The major focus of the programs supported by the IIAA was on public health, sanitation and medical care. Most of the United States personnel, during the war years, were provided by the Army and after the war they were converted to foreign service status in the State Department while others were recruited directly with the assistance of the U. S. Public Health Service.

The first cooperative health program was initiated in Ecuador in 1942. In 1943, programs were initiated in 7 more countries and during the next 10 years the IIAA carried on joint cooperative programs in 19 Latin American countries. There were more than 1500 health projects undertaken during the period at an estimated cost of approximately \$100 million, of which 63 percent was contributed by the host countries and 37 percent by the United States (Table 1).

The health programs were administered by a joint organization known in most countries as the Servicio Cooperativo Interamericano de Salud Publica (Servicio). Under the terms of the agreements, the United States and host governments each contributed personnel, money and materials to carry out the programs. It was usually provided that the Chief of the U. S. field party would also be director of the Servicio. Many of the programs supported by the IIAA during the period from 1942-1951, such as environmental sanitation, communicable disease control and public health training remain at the top of the health program priority list in many developing countries.

TABLE 1

Cooperative Health and Sanitation Projects Supported in Latin America by the Institute of Inter-American Affairs 1942-1951

Category	Number	Total Cost (dollars equivalent)
1. Environmental sanitation (water supplies, sewerage)	494	\$21,014,845
2. Construction and operation of health facilities (hospitals, etc.)	431	36,744,968
3. Special disease control	220	12,161,740
4. Cost of administration, rent, equipment, etc.	134	18,322,724
5. Training facilities and training programs	118	4,648,557
6. National and local health services	66	3,398,922
7. Medical care programs for highway workers, etc.	31	974,507
8. Health education	19	789,307
9. Social Welfare	7	90,350
10. Nutrition	6	458,461
11. Industrial hygiene	2	294,106
12. Medical research	2	6,287
13. School health	1	5,723
14. Public health statistics	1	566
15. Miscellaneous	8	711,887
TOTAL	1,540	\$99,632,951

The first decade of the IIAA marked the beginning of large scale bilateral and multilateral programs of cooperation in international health. During this period there was a great awakening of public health leadership in the Americas and in many of the developing areas of the world. The Pan American Sanitary Bureau was strengthened and its activities expanded. The World Health Organization was created and now has as its Director General the director of the first servicio in Brazil. Many of the health professionals involved in the programs of the IIAA have played and are playing key roles in the expansion of international cooperation in public health.

The tangible accomplishments of the programs supported by the IIAA were many. During the first 10 years of the program more than 1300 Latin and American physicians, nurses, engineers / other public health specialists were trained in the United States. Programs of malaria control were carried out which produced a rapid decline in the incidence of malaria in many areas of the Americas. In the late 1950's, with the effectiveness of DDT demonstrated, the programs were converted to programs of malaria eradication. In addition to the programs of training and communicable disease control significant accomplishments were achieved in the strengthening of many health ministries, in the construction and operation of new health centers, hospitals and community water supply facilities.

Programs of comparable scope and significance in other parts of the world did not develop until after the Second World War. A few small programs were carried out, such as the technical assistance

provided by the U. S. Public Health Service to the government of Liberia in developing public health and medical care programs. In addition to the development of malaria and smallpox control programs, the primary achievement was the development of a school for nurses and nursing auxiliaries in Liberia.

Programs of technical cooperation in public health and sanitation were begun in the Far East in 1946 with a U. S. Public Health Service survey of health conditions in the Philippines. In the Philippine Rehabilitation Act of 1946 the U. S. Public Health Service was authorized to spend \$5 million to help alleviate the critical health conditions existing in the Philippines at that time. The public health programs included the provision of safe water supplies in urban and rural areas, mass smallpox inoculation, development of maternal and child health services, health education programs and the establishment of public health training centers. This program was completed in 1950 and it contributed significantly to improving the health conditions of the people and the post war recovery of the Philippines. During the early post war period the U. S. Public Health Service also sent a special mission to Yemen (1946) and it assigned commissioned officers (physicians, nurses) to work in the refugee relief programs carried out by the United Nations Relief and Rehabilitation Agency (UNRRA). Although the program was administered multilaterally, it was financed largely (72 percent) by the United States.

In 1947 programs of military, economic and technical assistance were initiated in Greece and Turkey to help resist the threat of totalitarian aggression. The U. S. Public Health Service provided the technical assistance in the health projects in the programs of aid to Greece and Turkey. In Greece the operations were undertaken by the Greek Government with Greek funds meeting all internal (local) costs. The foreign exchange requirements were met from dollars provided by the United States. Among the health and sanitation accomplishments were the improvement of 375 community water supplies, construction of hospitals, sanitary and health centers and assistance to several schools of nursing. In Turkey, the U. S. support for the health projects was much smaller and was concerned with the initial stages of malaria control.

A major development in foreign aid occurred in June, 1947, when Secretary of State George Marshall delivered his famous "Marshall Plan" address at Harvard. In December of that year the Foreign Aid Act was passed in anticipation of the European Recovery Program. The Congress authorized and appropriated the full amount (\$597 million) requested by President Truman. Some 17 European countries (Austria, Belgium, Denmark, France, Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, Turkey, United Kingdom and Yugoslavia) received financial assistance under the Marshall Plan.

In 1948 the European Recovery Program (Marshall Plan) was initiated in earnest with the passage of the Economic Cooperation Act of 1948. The program in Europe required little in terms of technical assistance, particularly in the health sector. In the China Aid Act (Title III of

the Economic Cooperation Act) the program did include health and sanitation projects. In 1949, when programs were expanded geographically, public health activities were supported in the Republic of China (Taiwan), Indonesia, Burma, Thailand, Indo-China and the Philippines. In 1950 the Far Eastern Economic Assistance Act authorized aid to Korea. The war in Korea made long range economic development programs impossible for many years, but significant technical assistance was given in medical education and public health which helped to form the foundation for the rapid improvement in the health of the Korean people which has occurred in the past 15 years.

The inaugural address of President Truman on January 20, 1949, marked another major step forward in the evolution of U. S. foreign aid. The President said: "We must embark on a bold new program for making the benefits of our scientific advances and industrial progress available for the improvements and growth of underdeveloped areas." This concept was embodied under Title IV of the Foreign Economic Assistance Act of 1950. It was known as the Act for International Development. In Title IV the following important statement appeared: "It is declared to be the policy of the United States to aid the efforts of the peoples of economically underdeveloped areas to develop their resources and improve their working and living conditions by encouraging the exchange of technical knowledge and skills and the flow of investment capital to countries which provide conditions under which technical assistance and capital can effectively

and constructively contribute to raising standards of living, creating new sources of wealth, increasing productivity and expanding purchasing power." With this action the Technical Cooperation Administration was established. The Technical Cooperation Administration operated primarily in South Asia and the Middle East, the Economic Cooperation Administration in Europe and the Far East and the Institute of InterAmerican Affairs in Latin America.

From 1940 to 1950 the Children's Bureau participated in programs of technical cooperation under the Interdepartmental Committee on Scientific and Cultural Cooperation and through the Institute of Inter-American Affairs. The Children's Bureau became the first public agency in the world to provide international advisory services in the field of social welfare.

The advisory services took many forms. The assignment of pediatricians and social workers as advisors to governmental agencies; the assignment of a child welfare specialist to develop basic services and training programs; the development of maternity nursing services and training programs; cooperation in the revision of a government's children's code; assistance in the establishment of schools of social work; assistance in the improvement of maternal and child health, nursing-midwifery, and nutrition services. During this period many specialists came for training in maternal and child health, in social service and child welfare.

The establishment of the United Nations Relief and Rehabilitation Administration (UNRRA) in 1943, largely motivated by the United States, to aid "liberated populations" gain relief from suffering, including the "prevention of pestilence and . . . the recovery in the health of the people," formed a basis for the erection of the World Health Organization.

With the creation of the United Nations, the establishment of a truly international health organization was seriously contemplated. The first World Health Conference was called in New York in 1946, and a Constitution for the new organization was signed. It was two years before the requisite number of nations had ratified this Constitution, so that WHO officially came into existence in 1948. The new World Health Organization then embraced the functions of the three earlier health organizations--the Paris Office, the Health Organization of the League of Nations, and the UNRRA--as a specialized agency of the United Nations.

Among the immediate objectives of WHO were the setting of certain international standards in the medical field, the control of epidemics, and the gathering of statistics.

The World Health Organization operates through six Regional Organizations; by special agreement, the Pan American Health Organization functions also as the Regional Organization of WHO for the Western Hemisphere.

Late in 1946, the United States, as a member of the United Nations, participated in the creation of the United Nations Children's Emergency Fund (UNICEF) which has collaborated with international health agencies in programs that related to the health problems of children and youth. By far the largest part of UNICEF's budget is

spent for these purposes, which include programs in nutrition.

There have been a series of major organizational changes in the U. S. foreign aid agencies during the past 15 years which have been effected because of the changing nature of the problems and the requirements for effective programs. In the immediate post war period emphasis was on relief programs. The Marshall Plan signalled the start of the massive economic aid to rebuild a pre-existing industrial society. The changes in the last few years have come about because the problems of assisting less developed countries to maintain their independence and achieve social and economic progress through free institutions requires a vastly different type of program than was required to rebuild Europe. Throughout this period the U. S. Government has sought to strengthen the United Nations, the UN Specialized Agencies and various regional organizations that promote peace and stability. The many reorganizations of the foreign aid program has not significantly altered the support for public health and sanitation projects which has continued through the bilateral programs of the various U. S. agencies administering foreign aid, through such multilateral organizations as the World Health Organization, the United Nations Children's Fund (UNICEF), and the International Bank for Reconstruction and Development (World Bank) and through such regional organizations as the Inter-American Development Bank and the Pan American Health Organization.

Another significant development in U. S. foreign assistance programs occurred in 1954 when the U. S. began to distribute surplus agricultural commodities to developing countries in exchange for local currencies of the countries purchasing the commodities. The funds generated by these sales have been used to support developmental projects and a certain percentage of the funds are set aside for U.S. use, including the support of biomedical and rehabilitation research projects. The program is now called the Food for Peace Program and it is operated under broad policy direction by the Secretary of Agriculture, a Special Assistant to the President and the A.I.D. Administrator. The commodities operations are carried out by A.I.D. and voluntary agencies. In recent years increasing emphasis has been given to the role of this program as part of the total development effort. Because of the profound importance of malnutrition in preschool and school aged children, the program is being more sharply focused in an attempt to effectively meet their nutritional needs. In recent years a series of school lunch programs have been initiated which now reach more than 40 million children. About 400 million pounds of nonfat dried milk is provided to children in the developing countries through this program. Beginning in 1965 all the nonfat dried milk made available through this program was fortified with vitamins A and D.

In 1955, the Interdepartmental Committee on Nutrition for National Defense (ICNND) was organized by the U.S. Government to assist governments

of developing countries to assess the nutritional status and needs of their populations and to assist them in helping themselves through specific recommendations for nutritional improvement. The Committee was made up of representatives from various government departments - State, Defense, Agriculture, Health, Education and Welfare, the Atomic Energy Commission and the Agency for International Development. The Committee worked with a group of consultants from colleges, universities, government and private agencies, who were experts in nutrition, medicine, biochemistry, agriculture and food technology. There have been more than 350 U. S. specialists from more than 35 universities and colleges and 24 governmental and private agencies involved in the international nutrition survey program of the ICNND. Nutrition surveys have been conducted in 25 countries with the aid of thousands of local nutrition specialists and supporting personnel. The program of the ICNND has not only included nutrition surveys but sponsorship of international nutrition conferences to stimulate the exchange of scientific information and technical knowledge; research on a broad range of problems; and close cooperation with multilateral agencies on problems of mutual interest.

The most significant result of the work of the ICNND has been the increasing recognition by top government leaders throughout the world, including most recently the President of the United States, of pre-school child malnutrition as one of the most important, if not the most important, public health problems in the developing countries. This knowledge is

being translated into new U. S. Government policies in support of programs that give promise of alleviating this growing problem. Higher priority and increased support will be given to programs of agricultural production, food technology, family planning and nutrition. Valuable knowledge has been gained by the countries surveyed on which they could base programs to combat iodine deficiency goiter, kwashiorkor, anemia, avitaminosis A and other vitamin deficiencies; institutes of nutrition, either in government agencies or universities have been established in 20 of the countries; and, the surveys and other ICNND studies have added greatly to the sum total of fundamental scientific knowledge of nutrition. At the present time the ICNND is not only assisting with the conduct of nutrition surveys in Latin America, Africa and Asia; it is supporting research on the pathogenesis of kidney stones, macrocytic anemia, zinc deficiency, avitaminosis A, the nutritional value of different varieties of rice, and the value of fish protein concentrate and vegetable proteins in complete foods for infants; it is preparing food composition tables for Africa with FAO; it is evaluating the Food for Peace school lunch programs in several of the developing countries; and it is working with FAO, PAHO and WHO on problems of mutual interest. In 1965 the ICNND will be abolished as an interagency committee and the functions carried out by the same personnel in the Nutrition Section, Office of International Research, National Institutes of Health. The funds to support the ICNND have been provided primarily by the Advanced Research Projects Agency in the Department of Defense and from the Agency for International Development.

Following the election of the late President Kennedy in 1960 the foreign aid program was reappraised and reorganized and the Agency for International Development (AID) was created by a merger of the International Cooperation Administration (ICA) and the Development Loan Fund. At the time AID was created in 1961 the U. S. Government was supporting bilateral health and sanitation projects in 45 countries. There were 366 professional, technical and administrative personnel directly involved and the funds (dollars and U. S. use local currency) to support the projects were approximately \$85 million. The major categories of program support were in communicable disease control, environmental sanitation, medical education, public health administration, training and facilities construction.

There were several significant health program developments during the 1950's that warrant special mention. In 1955, the world-wide program to eradicate malaria began with several resolutions which were adopted by the Eighth World Health Assembly meeting in Mexico City. The world-wide program of malaria eradication has perhaps been the single most spectacular and successful public health program in the history of the world. The United States has not only been a major financial contributor to this program but it has provided technical experts as advisors in WHO, PAHO and in bilateral programs.

The United States has provided over \$171 million in grants and loans in support of 29 bilateral malaria eradication programs. It has also provided over \$200 million equivalent in local currency generated by the sale of surplus agricultural commodities (Food for Peace) and from other

counterpart sources. In addition the United States has provided over \$32 million to support participation of WHO and PAHO in the world-wide malaria eradication program. The United States has provided additional support for malaria eradication programs through its contribution to UNICEF. It is estimated that approximately \$28 million of UNICEF funds to support malaria eradication have been provided by the United States.

The importance of the world-wide malaria eradication programs cannot merely be measured by the statistics in declining morbidity and mortality from malaria. The figures are, however, striking where effective programs have been carried out. In Taiwan there were over one million cases of malaria annually and now there are only a handful of cases. In India the case rate is only 2 percent of what it was 10 years ago. Prior to initiating of malaria control programs in India there were 100 million cases and one million deaths per year. Throughout the world the number of cases of malaria have been reduced by more than 200 million, from 350 million to less than 150 million annually. The significance of this achievement is difficult to comprehend in human or economic terms. This has not only reduced human suffering throughout the world but it has made millions of people able to work who would otherwise have been ill, it has reduced the long term cost of providing personnel, facilities and drugs to treat those ill with malaria and it has opened new areas of land for agricultural production and the exploitation of natural resources.

The Expert Panel on Malaria of the International Cooperation Administration summed up the importance of malaria eradication with the following

statement:

"The Panel appreciates the purely economic benefits of malaria eradication but believes that the intrinsic value of human life and health is paramount.

"Some older members of the Panel who have observed man's degradation by malaria in his ineffective struggle against it in the pre-DDT era have revisited, in recent years, such formerly malarious areas as the Southeastern States of the United States, Sardinia, South Italy, India, Taiwan and Thailand. They have been impressed by the obvious beneficial transformation of the life of the people. It seems apparent that liberation from malaria is the prime reason for this change. Malaria eradication, however, is rarely given full credit for the benefits it brings; rather, the latter tend to be attributed to the increased population which crowd into the area to take up agricultural land previously unattractive, to the introduction of industry, to the improvement of schools and of roads, and to many other previously impossible developments.

"Sometimes one is so close to events of great social, cultural and economic impact that perspective is lost; in the case of malaria eradication, no one can visualize its total effect on the future of mankind, especially in the tropics."

Another significant program development of the 1950's was the beginning of the university-to-university program, financed by ICA, to strengthen educational institutions in the developing countries. The contracts financed by ICA in the health field were primarily in the field of

medical education, but one contract with the University of North Carolina School of Public Health was utilized to assist the National School of Sanitary Engineering in Peru. Assistance in nursing education, sanitary engineering and other fields related to public health was provided primarily by direct hire professionals rather than through university contracts. In recent years the general university contract program has been rapidly expanded but no new medical education contracts have been developed since 1962 (section IV E).

The third major health program development strongly supported by the U.S. Government during the 1950's was the strengthening of the multilateral agencies providing technical assistance in the health field, particularly the World Health Organization and the Pan American Health Organization.

The programs which the United States supports on a bilateral basis or through its contributions to WHO, PAHO, and UNICEF are cooperative activities and credit for the achievements must rest primarily with the host countries involved. The growth and strengthening of national health services, the contributions of health programs to the rapid economic and social development in many of the developing countries since World War II, the strengthening of the United Nations and its specialized agencies are all accomplishments of profound significance to which the United States has made important contributions. The accomplishments cannot, however, be measured in any quantitative terms. Perhaps the

most widely used measure of the contribution of public health in the past twenty years is the rapid decline in death rates throughout the less developed countries. This is undoubtedly related to many factors accompanying economic development, such as improved food production, better transportation and communication, but public health programs have unquestionably played a significant role.

III INTERNATIONAL HEALTH PROGRAMS CURRENTLY SUPPORTED BY THE UNITED STATES GOVERNMENT

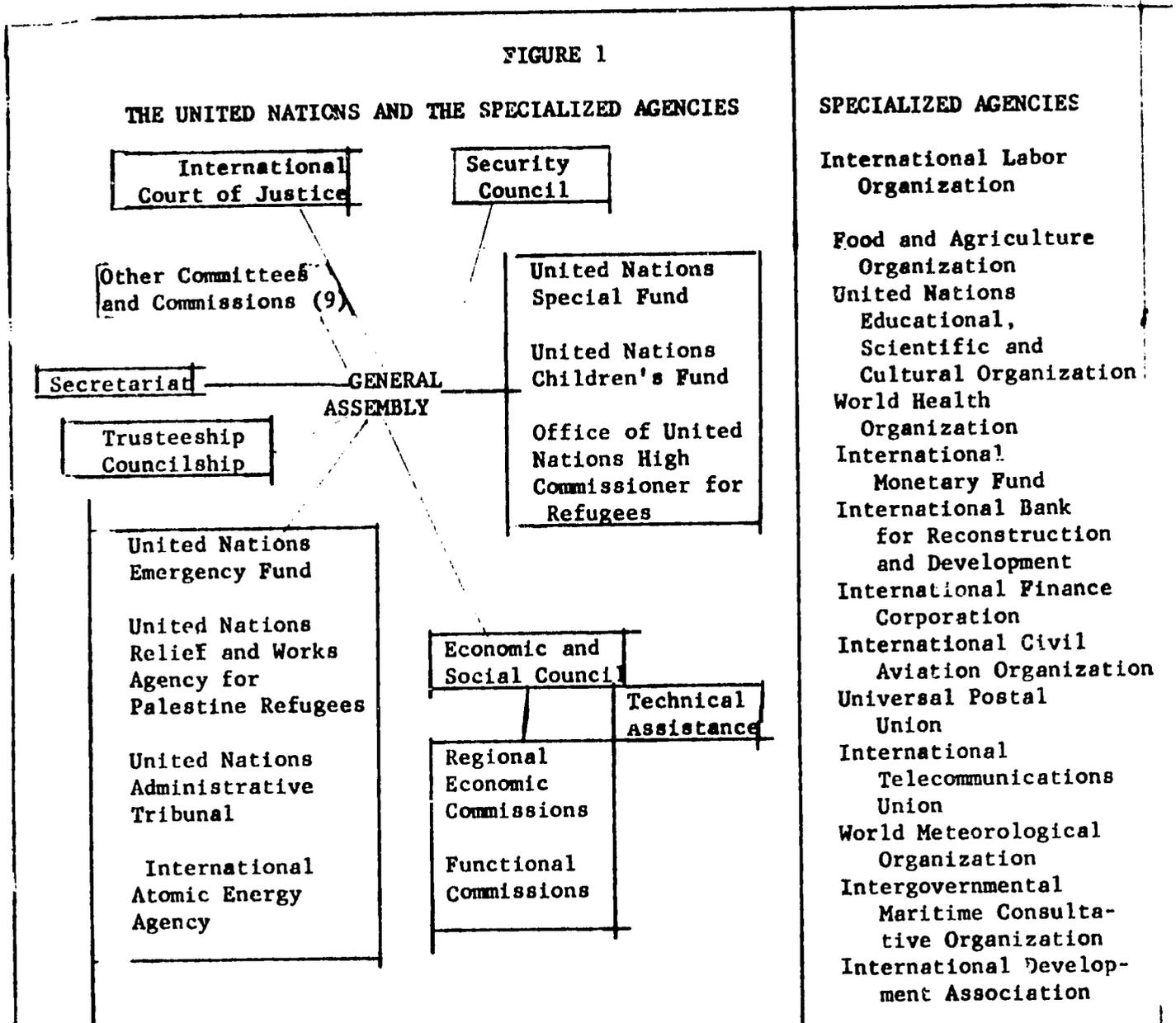
A. International Organizations

The United States played a key role in the founding of the United Nations twenty years ago and it has continued to be a strong supporter of the UN and the specialized agencies affiliated with it. The United Nations encompasses a family of organizations including certain specialized agencies; although the latter are provided for in the UN charter, they are not subordinate branches of the UN (Figure I). The specialized agencies are independent organizations, each governed by its own central assembly, conference or council, and each responsible for raising its own funds. The specialized agencies have entered into agreements with the UN to facilitate cooperation and collaboration on matters of common interest.

The United States makes two kinds of financial contributions to the UN and the UN specialized agencies: (1) "assessed" contributions which go to finance the administrative expenses of those organizations, as well as technical assistance, on a previously agreed arrangement for cost sharing, and (2) "voluntary" contributions, the amount of which the United States Government determines, taking into account our own national interest in the special programs for economic development, technical cooperation, scientific exchange, refugee relief and other purposes. Prior to 1962 the U. S. made voluntary contributions in the amount of \$17.5 million to the WHO's Special Fund for Malaria Eradication before this became part of the WHO regular budget. In recent years voluntary

contributions have been made to support research. The contribution of the United States to the UN, the specialized agencies and special UN programs was \$189.4 million in 1964 to support programs in less developed countries. The total U. S. contribution to international organizations and programs (not including subscriptions to the capital stock of the International Bank for Reconstruction and Development and similar financing institutions) was estimated at \$240.8 million for 1964. The U. S. contributions were made to 54 different international organizations and 21 special peace keeping programs.

The two major international (non-regional) organizations concerned primarily with health problems in the developing countries are the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). The World Health Organization is a specialized agency affiliated with the UN while UNICEF is a semi-autonomous agency within the UN which is devoted to improving the conditions of children and youth throughout the world (Figure 1).



In addition to WHO and UNICEF there are a number of specialized agencies, such as the Food and Agriculture Organization, affiliated with the UN that support limited health and sanitation programs or programs in such fields as nutrition and home economics that are indirectly related to health. Health and sanitation projects may also receive financial assistance from such UN programs as the Expanded Program of Technical Assistance (EPTA), The Special Fund and Economic Assistance to the Congo (Table 2).

TABLE 2

INTERNATIONAL ORGANIZATIONS SUPPORTING HEALTH AND
SANITATION PROGRAMS IN THE DEVELOPING COUNTRIES

I. International Organizations

A. Those Active Primarily in Health

1. World Health Organization
2. United Nations Children's Fund

B. Those With Limited Programs

1. Food and Agriculture Organization
2. International Atomic Energy Agency
3. International Labor Organization
4. United Nations Educational, Scientific and Cultural Organization
5. United Nations Relief and Works Agency for Palestine Refugees

II. United Nations Programs

A. Those Providing Primary Support for Health Programs

None

B. Those Providing Limited Support for Health Programs

1. The UN Expanded Program of Technical Assistance (EPTA)
2. The UN Special Fund
3. The UN Technical and Operational Assistance to the Congo

The United Nations Childrens Emergency Fund (UNICEF) has a semi-autonomous status within the United Nations. The Executive Director of UNICEF is appointed by the Secretary General of the UN in consultation with the Executive Board on UNICEF. About 85 percent of UNICEF's budget is devoted to support of health and nutrition programs for children, the remainder is spent on programs of education, social welfare, vocational training and related activities. The staff of UNICEF is quite small and is used to administer the program, most of which provides equipment and other support to projects administered in the field by the host country in consultation with WHO or other specialized agencies providing the technical assistance element in the project. In 1964 UNICEF was providing aid to 553 projects in 117 countries and territories.

The number of governments supporting UNICEF is steadily increasing and now totals 117. In addition to governmental contributions, UNICEF receives about \$8 million annually from private sources. The expenditures by UNICEF reached a total of \$38.9 million in 1963 and are expected to rise to \$40 million by 1964 or 1965. The United States has pledged \$12 million annually since 1960. Its contribution as a percentage of the total has declined from 70 percent in 1950 to 48 percent (1960) to 40 percent (1964) because of the increased financial contribution from other countries. The United States has played an active role, not only in the founding of UNICEF, but in all of its activities since that time. The United States has always served on the Executive Board, with the Chief of the Children's Bureau or some staff member representing the United States.

The World Health Organization was established in 1948 as a result of efforts initiated by the United Nations. The World Health Organization is composed of more than 120 member nations. The WHO is governed by the World Health Assembly and an Executive Board. It carries out its operations through six regional offices. The regional headquarters are located in Washington (The Americas), Manila (Western Pacific), New Delhi (Asia), Cairo (Eastern Mediterranean), Copenhagen (Europe), and Brazzaville (Africa).

The World Health Assembly is composed of delegates representing the more than 120 WHO member states and is the organization's governing body. It determines policies, votes the annual program and budget, reviews the work done and has the power to adopt regulations on international health questions such as quarantine requirements.

The Executive Board of WHO is composed of 24 health specialists who serve on the Board in an individual capacity. The Board prepares the work of the Health Assembly, acts on the Assembly's decisions and it may authorize emergency aid between meetings of the Assembly. The Regional Committees consist of representatives of member states in the six WHO regions (Africa, Americas, South East Asia, Europe, Eastern Mediterranean and Western Pacific). The Regional Committees usually meet once a year. They review the work of the regional office and plan its continuation.

The purpose of the WHO is "the attainment by all peoples of the highest possible levels of health." In its work toward the achievement of this objective WHO acts as the coordinating authority on international

public health work; helps to build strong national health services in countries around the world; stimulates and works with governments on programs to eradicate or control epidemic, endemic, and other widespread diseases such as malaria, smallpox, cholera, tuberculosis and venereal disease; promotes activities for the improvement of nutrition, sanitation, mental health, maternal and child health; provides fellowships for specialized training; promotes and supports research; conducts seminars, meetings and conferences to promote the exchange of information and hasten the application of new knowledge; supports programs of education for physicians and other professional health workers; works for the standardization of nomenclature and international standards with respect to biologicals, pharmaceutical products, diagnostic tests, and food inspection; supports reference laboratories; furnishes direct advice and aid to governments in emergencies; convenes expert panels to provide technical information and prepare special reports; and seeks to enlarge our knowledge of the relationships of health to social and economic development.

The World Health Organization has a staff numbering more than 2500, consisting of doctors, nurses, administrators, scientists, statisticians, interpreters, translators, secretaries and many others. The World Health Organization was participating in over 800 governmental health projects in 143 countries in 1963. The number of projects has increased since that time.

The funds to support WHO assisted projects come from six sources:

(1) the WHO regular budget, (2) voluntary contributions to WHO, (3) the UN Expanded Program of Technical Assistance, (4) the UN Special Fund, (5) PAHO and (6) UNICEF. The funds available to support health and sanitation projects now exceeds \$90 million annually. The United States provides about \$40 million of this WHO supervised fund.

The United States is a member of both WHO and PAHO. The United States not only makes a major financial contribution to these organizations but it participates actively in the policy making through its delegation at the World Health Assembly. Many outstanding Americans are full time employees of these organizations as international civil servants, as short term technical consultants, as members of evaluation teams and as members of expert committees. There is close coordination of the programs supported directly by the U. S. on a bilateral basis and those supported by WHO, PAHO, and UNICEF. The technical staffs of WHO, PAHO and AID work closely in the field, at the regional and at the headquarters level. Many formal and informal meetings are held between WHO, PAHO and AID personnel in close association with host country technical personnel and UNICEF representatives. There has been a continuing effort by the U. S. to strengthen both WHO and PAHO with an increasing reliance on these international and regional organizations to provide health program technical assistance to the developing countries.

There are five intergovernmental organizations that support limited international health programs or projects. The Food and Agriculture Organization (FAO) supports many activities with a direct or indirect

effect on human nutrition. The Food and Agriculture Organization works closely with governments in developing countries, UNICEF, WHO and donor countries on nutrition programs for children. It also works closely with the Interdepartmental Committee on Nutrition for National Development (ICNND) in nutrition surveys, food composition tables, special reports and related projects. The Food and Agriculture Organization supports a special world food program which is receiving \$40 million in U. S. surplus agricultural commodities under the Food for Peace Program, \$4 million to provide shipping services and \$6 million in cash from AID. The program will distribute about \$90 million in food supplies to needy people in the developing countries over a 3-year period. Although the program is to meet immediate food needs, its long range objective is to eliminate the conditions which make food aid necessary. In many countries there is increasingly close cooperation between host country officials, FAO, U. S. Food for Peace Officers and representatives of voluntary agencies.

The International Atomic Energy Agency (IAEA) is not a UN specialized Agency, but it was formed following an address to the UN by President Eisenhower in December, 1953. In 1954, a resolution was adopted by the UN General Assembly which expressed the hope that "The International Atomic Energy Agency would be established in order to assist in lifting the burdens of poverty, hunger and disease." After numerous meetings and several major conferences dealing with the problem, the statute

establishing the IAEA went into effect in 1957. The International Atomic Energy Agency (IAEA) supports a variety of health projects under authority of Article II of its statute which declares: "The Agency shall seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world." The Agency supports many activities to enlarge the contribution to health. They include provision of technical assistance and training in the atomic energy field through extending to member states the services of special missions, experts, and visiting professors, through awarding fellowships and making training courses available to many individuals, and through providing equipment and nuclear material for use of member states in developing nuclear energy programs. They also include dissemination of scientific and technical information on nuclear energy through many specialized meetings, publications, and the provision of library services, awarding of research contracts to institutions, universities and hospitals in member states, as well as the undertaking of special research tasks at the IAEA laboratory at Seibersdorf, Austria; promotion of increased health and safety in the atomic energy field through development of safety standards and technical manuals, provision of technical advice on particular projects, coordination of activities concerned with health and safety hazards, and coordination of international research; study of methods of radioactive waste management; and formulation of possible bases for unification of law regarding civil liability for

nuclear damage. In all these elements of IAEA activity, the United States plays an active and positive role. It contributes the time, ideas and knowledge of many experts; provides training for fellowship holders; and makes available equipment, publications, and special nuclear materials. The work of the IAEA is financed by a regular budget, funded through assessment of the members, and an operational budget, funded through voluntary contributions by the members.

For the year 1964, the seventh (1963) regular session of the General Conference appropriated \$7,444,500 for the regular budget, allocated \$2,340,000 for the operational budget; and decided that, for the financing of the operational budget, the target for voluntary contributions to the General Fund should be \$2 million.

The scale of assessment of the United States for 1964 for the regular budget was fixed at approximately 32 percent or \$2.38 million. In response to the appeal for contributions to the General Fund to finance the operational budget for 1964, the United States pledged up to \$750,000, of which amount \$500,000 would be an outright gift and the remaining \$250,000 would be used to match unrestricted dollar contributions by others after the \$1 million mark had been reached. In addition, the United States pledged to make a contribution in kind, up to a total of \$500,000 to provide for: (1) the making available to the Agency of the services of U. S. experts, (2) the study in the United States by some 50 fellows, and (3) the making of small equipment grants in support of Agency projects.

The International Labor Organization (ILO) supports a limited number of studies related to medical care, health and safety problems of industrial workers and seamen and studies of medical programs under social security. The United Nations Educational, Scientific and Cultural Organization (UNESCO) helps to stimulate new curricula in educational institutions and the use of new educational media and methods in a variety of fields related to medicine and public health. Of particular importance has been the support of new approaches to the teaching of biological and other basic sciences. It also supports seminars and conferences, faculty exchanges and other activities to improve communication in a variety of scientific fields. In both of these organizations it is difficult to specify the funds or personnel involved directly in health related activities because these are usually part of larger programs.

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA) was created to provide subsistence for the Palestine refugees, while helping them become self-sufficient. The United States contributed \$24.7 million for fiscal year 1963, including about \$7.5 in Food for Peace commodities and \$17 million in cash. The United States contribution was \$17.2 million in 1964 and \$16 million has been requested for 1965. The total budget for UNRWA was \$35.2 million in calendar year 1963. The program for the refugees includes support for environmental sanitation, medical care and nutrition services employing more than 3400 professional, technical and administrative personnel at a

cost of more than \$5.5 million annually. These programs have contributed greatly to the improved health of the refugees and to their potential for self-sufficiency.

The United Nations special programs that provide financial support for WHO supervised health and sanitation projects are (1) the Expanded Program of Technical Assistance (EPTA) which provides about \$7 million annually from its \$50 million budget, to increase the program support under the WHO regular budget; (2) the United Nations Special Fund which gives priority in fields essential to the integrated technical, economic and social development of the less developed countries. A number of projects financed by the Special Fund are carried out by WHO, particularly the development of water supply and sewerage services. The United States pledged \$60 million for the programs of EPTA and the Special Fund for calendar year 1963, most of which was financed from fiscal year 1963 AID appropriations. A similar amount was contributed in 1964 and is planned for 1965. (3) the United Nations Technical and Operational Assistance to the Congo has provided special technical and economic assistance to the Republic of Congo (Leopoldville) since independence. The United States and other contributors, including the Congo itself, now finance through the UN Fund for the Congo, 178 doctors providing medical and public health services. The United States contributes one million dollars, matched by other contributions, to finance these doctors as well as secondary school teachers (approximately 800) and local magistrates.

B. Regional Organizations

The United States contributes financially to nine regional organizations supporting international health and sanitation programs (Table 3).

TABLE 3

REGIONAL ORGANIZATIONS SUPPORTING INTERNATIONAL
HEALTH AND SANITATION PROGRAMS

I. Regional Organizations

A. Organizations Active Primarily in Health

1. Pan American Health Organization

B. Organizations with Limited Health Programs

1. Organization of American States
 2. InterAmerican Children's Institute
 3. Central Treaty Organization
 4. Colombo Plan
 5. Organization for Economic Cooperation and Development/
Development Assistance Committee
 6. Southeast Asia Treaty Organization
 7. South Pacific Commission
 8. Organisation de Coordination et de Cooperation pour la Lutte
Centre les Grandes Endemics
-

1. Organizations Active Primarily in Health

a) Pan American Health Organization

The Pan American Health Organization is the oldest regional and international health organization in the world, dating its origin from 1902 when the Pan American Sanitary Bureau was created. The

Pan American Health Organization (PAHO) is the intergovernmental health agency for the Americas while the Pan American Sanitary Bureau is the Secretariat of PAHO and it also serves as the Regional Office of the WHO for the Americas.

The Pan American Health Organization comprises: (1) the Pan American Sanitary Conference, the supreme governing authority in which all governments of the Organization are represented, which meets every four years to determine policy and elect the Director of the Pan American Sanitary Bureau; (2) the Directing Council, composed of one representative from each government which meets annually between conferences, reviews and approves the annual program and budget of the Organization and acts on behalf of the Conference.; (3) the Executive Committee, composed of representatives of seven member governments elected by the Council for overlapping terms of three years, which meets twice a year to advise the Council; and (4) the Pan American Sanitary Bureau (PASB) which is the operating arm of the Organization.

The fundamental purposes of PAHO are "to promote and coordinate efforts of the countries of the Western Hemisphere to combat disease, lengthen life, and promote the physical and mental health of the people."

The work is carried out by country teams under the direction of a country representative working under the general direction of six offices (Mexico City, Caracas, Guatemala City, Lima, Rio de Janeiro and Buenos Aires) with basic planning at the headquarters in Washington, D. C. The

advisory programs and services to the governments are in five broad areas: (1) eradication and control of communicable diseases, (2) strengthening health services, (3) environmental sanitation, (4) education and training, (5) research.

The Pan American Health Organization derives the funds for its operations from several sources. The main source of funds is the assessments of the governments of PAHO. An additional contribution to the regular budget comes from contributions of France, the United Kingdom, the Netherlands and miscellaneous sources. Voluntary contributions, particularly to the PAHO Special Malaria Fund, are made by member governments. The World Health Organization makes available funds from its regular budget to PAHO and funds are also provided from the Expanded Program of Technical Assistance (EPTA) of the United Nations. The United Nations Childrens Fund (UNICEF) cooperated with PAHO by providing supplies and equipment for health programs. A limited amount of financial support is also provided by the Program of Technical Cooperation of the Organization of American States.

The regular budget of PAHO for calendar year 1962 was \$5,240,000 of which assessments against governments amounted to \$5,140,000. The United States assessment of 66 percent amounted to \$3,392,000 which was made available from fiscal year 1963 funds. In addition to the regular contribution to PAHO, the United States voluntarily contributed \$2,000,000 to the Special Malaria Eradication Fund and \$300,000 to the Community

Water Supply Fund. The total budget of PAHO, including the funds from WBO, was almost \$14.4 million. In addition, UNICEF's contribution to health programs in Latin America was approximately \$6 million.

The total PAHO/WHO budget for the Americas for 1965 is estimated to be \$17.3 million. Included in this total is the PAHO regular budget of \$12.2 million and \$5.1 million from WHO. The United States will contribute \$4.6 million (66 percent) to the PAHO regular budget of \$7.19 million and \$1.8 million as a voluntary contribution to the Special Malaria Eradication Fund.

2. Organizations with Limited Health Programs

a) Organization of American States (OAS)

The Organization of American States (OAS) was formally chartered on April 30, 1948, at Bogota, when representatives of 21 American nations signed the treaty creating the Organization. One of the major purposes of the OAS is to promote, by cooperative action, the economic, social and cultural development of the member states. The Council is the permanent executive body of the OAS while The Pan American Union serves as its general secretariat. The Technical Cooperation Program of OAS was initiated in 1956 and is carried out under the Inter-American Economic and Social Council. In the fields of medicine and public health the OAS has promoted the exchange of information on problems of common interest, cooperative programs in communicable disease control and the exchange of technical specialists and consultants in a variety of disciplines.

The creation of the OAS led to a series of cooperative ventures between the American Republics. In 1958 the Foreign Ministers of the

American Republics established the Committee of 21, under the aegis of the OAS, to work out measures for increased economic cooperation under Operation Pan America. In 1959 the Inter-American Development Bank (Section II C) was created to promote economic development in Latin America. In September 1960, the Act of Bogota was signed to "launch a program for social development, in which the emphasis should be given to those measures that meet social needs and also promote increases in productivity and strengthen economic development."

The next major step was the approval, on August 17, 1961, of the Alliance for Progress with a Declaration of the Peoples of America. The countries signing the Declaration, including the United States, agreed to work toward a series of goals, including: "To press forward with programs of health and sanitation in order to prevent sickness, combat contagious disease, and strengthen our human potential."

The Charter of Punta Del Este was the document which established The Alliance for Progress within the OAS framework. The following recommendations were part of a resolution adopted by the Inter American Economic and Social Council which created the Alliance for Progress:

"b. To formulate projects for gradual development for the following purposes:

(1) To supply potable water and sewage disposal for at least 70 per cent of the urban population and 50 per cent of the rural population during the present decade, as a minimum;

(2) To reduce the present mortality rate in the children under five years of age by one-half;

(3) To eradicate malaria and smallpox from the Hemisphere and intensify the control of other common infectious diseases, such as

enteric ailments and tuberculosis;

(4) To make substantial improvements in the feeding and nutrition of the most vulnerable sectors of the community by increasing the consumption of animal or vegetable protein; and

(5) To take measures for giving increasingly better medical care to a larger number of patients, by improving the organization and administration of hospitals and other centers for the care and protection of health.

3. To establish as a broad goal for health programs during the present decade an increase of five years in the life expectancy at birth of every person.

4. To recommend that governments, whenever they consider it advisable, utilize the technical advisory services of the Pan American Sanitary Bureau, Regional Office of the World Health Organization, in the preparation and execution of the aforementioned plans; and likewise to support the projects of that organization for establishing systems of health planning in the countries of Latin America.

5. To recommend, at the same time, the use of other means of technical assistance, whether multilateral or bilateral, available to the countries of this hemisphere."

The United States has provided technical assistance through the Agency for International Development (AID) and its support for PAHO. It has provided economic assistance through AID, the Inter-American Development Bank, the International Bank for Reconstruction and Development and the Export-Import Bank (see Sections III C and D). The United States Coordinator for the Alliance for Progress is also the Assistant Secretary of State for Latin American Affairs. The Latin American Bureau of AID is the main operating arm of U.S. economic and technical cooperation within the Alliance for Progress.

The program of the Alliance was evaluated in 1962 and again in 1963. Following the 1963 evaluation the Inter-American Committee for the Alliance for Progress (called CIAP - the initials of its name in Spanish) was created to serve as a strong coordinating mechanism. The CIAP review now includes an analysis of progress and problems in the national health plans and the achievements of the health programs.

b) Inter-American Children's Institute

The Institute was organized in 1927, as the American International Institute for the Protection of Children, after years of patient and effective effort by Dr. Luis Morguio of Uruguay. The United States joined in 1928 and the first U.S. representative of the Directing Council was the Assistant Chief of the Children's Bureau.

In 1942 the VIII Pan American Child Congress met in Washington and, for the first time, a special section to study Inter-American Cooperation was organized. The recommendations laid the foundation for measures strengthening the Institute and helping it to become a more effective organization. By the time the IX Congress convened in Caracas in 1949 all of the American Republics were members of the Institute and the Institute became a specialized organization of the OAS.

The IX Pan American Child Congress passed a resolution calling upon the American countries to give full support to UNICEF and urging UNICEF to consider the pressing needs of the children of the Americas.

In 1950 a program of Technical Cooperation under the auspices of the InterAmerican Economic and Social Council (IAECOSOC) was initiated in which all of the Inter-American specialized agencies were involved. The technical project sponsored by the Inter-American Children's Institute under this program was a workshop for administrators of children's agencies. This program continued for five years and provided training for specialists in all the American Republics. In 1963 a training program for social workers associated with nutrition programs was jointly sponsored by UNICEF and the Institute.

The year 1963 witnessed the termination of the last specific project in the field of child welfare supported on a bilateral basis by the United States. Many of the present projects, such as malaria eradication and the development of safe community water supplies, have a direct effect on the health and welfare of infants and children. Two additional activities are of great significance: (1) the more than 2,000 Peace Corps Volunteers serving in 17 of the American Republics and (2) Operation Ninos -- the school feeding program which now involves over six million children.

Despite the great progress which has been made, the Institute, created by the 21 American Republics to serve as the official spokesman for children, could be strengthened and its relationships with UN agencies, voluntary organizations and the member governments expanded. At the present time the total assessed budget is about \$80,000 annually with a U.S. contribution of \$32,000.

c. Central Treaty Organization (CENTO)

The primary purpose of CENTO is mutual security.

Within this broad scope member countries agreed to develop the necessary military and countersubversive measures and to improve the socio-economic well-being of their people through economic cooperation. The CENTO activities in medicine and public health have included seminars in nursing, hospital administration and preventive medicine and the services of experts in these fields. The seminars have usually included specialists from the United States. In addition to its regular contribution (\$71,293 in 1963), the United States makes a small voluntary contribution to the CENTO Multilateral Technical Cooperation Fund from AID appropriations.

d. Colombo Plan

The Colombo Plan Council for Technical Cooperation in South and Southeast Asia is not designed to develop or administer aid programs, but to assist through the exchange of views and the collection and dissemination of information on technical assistance programs undertaken by its member countries on a bilateral basis and training programs. The budget for the operations of the Council is approximately \$90,000 and is made up by equal contributions from each of the 20 member governments. Council membership includes Australia, Bhutan, Burma, Cambodia, Canada, Ceylon, India, Indonesia, Japan, Korea, Laos, Malaysia, Nepal, New Zealand, Pakistan, Philippines, Thailand, United Kingdom, United States and Vietnam.

e. South East Asia Treaty Organization (SEATO)

The United States provides technical and financial support to three SEATO medical research programs. The SEATO Cholera Research Program has as its principal activity the Pakistan-SEATO Cholera Research Laboratory in Dacca, East Pakistan. It is financed mainly by a \$600,000 United States contribution through AID and the National Institutes of Health, although contributions are made by the governments of Pakistan, the United Kingdom and Australia. The Government of Pakistan contributes the bulk of the staff but scientists also come from the United States, Australia and the United Kingdom. In Bangkok, Thailand, the Walter Reed Army Institute of Research (WRAIR) has developed the U.S. Army component of the SEATO Medical Research Laboratory in cooperation with the Armed Forces of Thailand under the auspices of the SEATO Council. The U.S. Army also participates in the SEATO Clinical Research Center in Bangkok. Technical personnel and financial support (about \$1 million per year) are provided for both of these institutions by WRAIR.

f. Organization for Economic Cooperation and Development /
Development Assistance Committee (OECD/DAC)

The Organization for Economic Cooperation and Development (OECD), particularly the Development Assistance Committee (DAC), works for the expansion and improvement of the financial and technical assistance to economically underdeveloped countries. The members of the

OECD are: Austria, Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States. The total bilateral assistance commitments in grants and loans by DAC members other than the United States totalled \$2.7 billion in 1963. The major contributors were France (\$865 million), Germany (\$671 million), United Kingdom (\$458 million), Japan (\$268 million) and others, including Belgium, Canada, Denmark, Italy, Netherlands, Norway and Portugal (\$416 million). In addition, the DAC countries increased their contributions to the multilateral lending agencies, the UN and the UN specialized agencies. Exact figures are not available on the number of people or the funds devoted to public health programs by the DAC countries. The programs are extensive, however, in Africa, the Middle East and in South and South East Asia. This is particularly true of the programs supported by France and the United Kingdom.

g. South Pacific Commission

The South Pacific Commission's purpose is to promote the economic and social advancement of the people in the dependent territories administered by Australia (Papua, New Guinea, Nahr); France (New Caledonia, French Polynesia, Wallis, Fatona); New Zealand (Takelu Island, Avative); United Kingdom (Fiji, British Solomons Island Protectorate, Gilbert Island, Ellice Island); United States (American Samoa, Guam, Trust Territory of the Pacific Island); and a United

Kingdom-France Condominium (New Hebrides). The total United States contribution to the South Pacific Commission in 1963 was less than \$84,000. The health programs carried out in the Trust Territories of the Pacific Islands are administered by the Department of the Interior and are budgeted for by that Department.

h. Organisation de Coordination et de Cooperation pour la Lutte Contre les Grandes Endemics (OCCGE)

The purpose of the OCCGE is to control and fight endemic disease in the member states. The member states include Dahomey, Guinea, Ivory Coast, Mali, Mauritania, Niger, Senegal, Togo and Upper Volta. There are three research centers associated with the OCCGE: (1) a general research center for tropical diseases in Upper Volta; (2) a leprosy research center and a trachoma and ophthalmological disease research hospital in Mali; and (3) a food and nutrition center in Senegal. In conjunction with the OCCGE, the AID financed a regional measles vaccination program. In 1964 the United States supplied one million doses of measles vaccine (cost \$1.7 million) for the highly successful measles immunization campaign carried out by the OCCGE.

C. Agencies and Institutions Assisting Economic Development Mainly Through the Supply of Capital or Commodities

Three major United States Government agencies or institutions and three international agencies are involved in financing of

foreign assistance and foreign trade (Table 4). One does not ordinarily associate the Export-Import Bank, the World Bank, or similar agencies with public health and sanitation programs, but they are in fact extremely important.

1. Agencies of the United States Government

a) Export-Import Bank

The Export-Import Bank was established in 1934 as an independent agency of the United States Government. Its primary purpose is to stimulate and facilitate the United States foreign trade. Its loans are in dollars; they must be repaid in dollars, and they must be used for purchases of U.S. goods and services. Since its inception, the Bank has authorized loans of almost \$14 billion, of which about \$9.3 billion has been disbursed. The Bank has financed the export of U.S.-manufactured hospital equipment, valued at more than \$5 million, and it has loaned more than \$60 million for water supply and sewerage projects in eight Latin American countries as well as in Syria, Iran, Liberia, and Trinidad.

b) Agency for International Development

The program of the Agency for International Development will be described in detail in another section of this report (Section III D).

c) Commodity Credit Corporation

The Commodity Credit Corporation is an agency of the Department of Agriculture. It has a credit program to promote exports of United States surplus agricultural commodities. The Corporation provides credit approval

for U.S. firms shipping commodities in the Commodity Credit inventory or under loan to the Corporation. The Corporation also donates commodities to U.S. voluntary agencies for overseas shipment under Public Law 480. This voluntary donation program provides surplus agricultural commodities for school feeding programs, refugee relief, and disaster relief programs, which will exceed \$650 million in value in fiscal year 1965.

TABLE 4

AGENCIES AND INSTITUTIONS ASSISTING ECONOMIC DEVELOPMENT
MAINLY THROUGH THE SUPPLY OF CAPITAL OR COMMODITIES

United States Agencies

1. Export-Import Bank
2. Agency for International Development (AID)
 - a. Dollar Grants and Loans
 - b. Foreign Currency Loans and Grants
3. Commodity Credit Corporation (Department of Agriculture)

International Agencies

1. International Bank for Reconstruction and Development (World Bank)
2. International Development Association
3. Inter-American Development Bank
 - a. Ordinary Capital Resources
 - b. Fund for Special Operations
 - c. Social Progress Trust Fund

2. International Agencies

a) International Bank for Reconstruction and Development

The International Bank for Reconstruction and Development (World Bank) was founded at the Bretton Woods Monetary and Financial Conference in July 1944. The Bank is an international cooperative institution with 102 member countries, including the United States. Each member country subscribes to the Bank's capital stock in accordance with its economic strength. The United States is the largest shareholder, being assessed for 29.3% of the Bank's subscribed capital of \$21.6 billion. Like all other members, the U. S. has paid in only 10% and the remainder is subject to call to meet the Bank's obligations. The Bank is associated with the United Nations as a specialized agency.

The Bank's principal purpose is to assist economic development in its less developed member countries by providing scarce capital and technical assistance services. The Bank operates primarily by making loans, in cases where private capital is not available on reasonable terms. The Bank began operations in 1946. By the end of June 1965, the Bank had made 424 loans totaling \$8.7 billion to help finance some 1,000 projects in 77 member countries. A little over a third of its development lending has been for electric power; a third for transport improvement; and the balance for agriculture, industry, general development purposes, telecommunications, water supply and education.

By the end of June 1965, the Bank had lent \$30.9 million for water supply projects in Iceland, Malaysia, Malta and the Philippines. In Iceland, a Bank loan of \$2 million is assisting a unique project to extend the supply of water from many natural hot springs to houses and buildings in Reykjavik, the capital. The water is used both for space heating and as hot tap water. In Malaysia, a loan of \$6.8 million was made to finance a project to increase water supply to Singapore. The loan will assist the first stage of a long-range program to develop the considerable resources of the Johore River in the State of Johore on the Malaysian mainland as a new source of water supply for Singapore island. In Malta, a Bank loan of \$7.5 million is assisting the construction of a combined thermal electric power and sea water distillation project. In the Philippines, the Bank financed a study directed toward the improvement and expansion of the water supply system in the Manila metropolitan area. The study resulted in a development project for which the Bank made a loan of \$20.2 million.

A chapter on health and health services is usually included in the reports of the general survey missions organized by the Bank. The surveys serve as the basis for long-range development programs. To date, Bank missions have carried out general surveys in the following countries: British Guiana, Ceylon, Colombia, Cuba, Guatemala, Iraq, Italian Somaliland, Jamaica, Jordan, Kenya, Kuwait, Libya, Malaya, Morocco, Nicaragua, Nigeria, Spain, Surinam, Syria, Tanganyika, Thailand, Territory of Papua and New Guinea, Turkey, Uganda and Venezuela.

b) International Development Association

The International Development Association (IDA), an affiliate of the World Bank, originated in resolution submitted by Senator A. S. Mike Monroney to the U. S. Senate at the end of 1957. His proposal received the support of the U. S. Administration, which sponsored it at the 1959 Annual Meeting of the Bank. IDA formally came into existence in 1960. The purposes of IDA are to promote economic development, increase productivity and thus raise standards of living in the less developed areas of the world. Like the Bank, IDA helps to finance development projects which have been carefully selected and prepared; but it provides capital on more liberal terms of repayment. IDA credits up to now are repayable over 50 years, are free of interest, and carry only 3/4 of 1% annual service charge. All World Bank members are eligible to join IDA and 95 had done so as of September 1, 1965. The resources of IDA are entirely separate from the World Bank and it shares with the Bank the same directors, officers and staff. IDA extended 77 credits totaling \$1,085.4 million in 29 member countries. In the main, these

credits were extended for purposes similar to those of Bank loans: \$96.7 million was lent for power, \$464 million for transportation, \$219.6 million for agriculture and forestry, \$121.5 million for industry, \$75 million for telecommunications, \$62.5 million for water supply and \$46 million for education projects.

A credit of \$3.9 million, made to the Government of China, financed the expansion and improvement of water supply facilities in Taipei, the capital, and in eight suburban communities. In Jordan, two credits totaling \$5.5 million are assisting the expansion and improvement of water supply systems in Amman, the capital, Ramallah in the Jerusalem area, Zarqa, Irbid-Mafraq and Nablus. In Nicaragua, a credit of \$3 million is financing the first stage of a 20-year program to increase and improve water supplies to the capital city of Managua. Two credits totaling \$50 million were made in Pakistan to provide adequate and safe water supply and sewerage services in Dacca and Chittagong, the two most important cities in East Pakistan.

c) Inter-American Development Bank

The Inter-American Development Bank (IDB) was organized in 1959 to accelerate the economic development of Latin American member countries. There are three operating funds of the Bank: its ordinary capital resources, a Fund for Special Operations, and the Social Progress Trust Fund. The loans from the ordinary capital resources of the Bank for water supply and sewerage facilities totalled \$38.5 million for nine projects up to December 31, 1963. Loans under the Fund for Special Operations, which can be repaid in the currency of the borrower, included

three projects for water supply and sewerage facilities totalling \$17.2 million to December 31, 1963. The Social Progress Trust Fund is administered by the Inter-American Development Bank (IDB) under an agreement with the United States Government. In 1961, the Congress appropriated \$500 million for the Social Progress program in Latin America which was allocated as follows: \$394 million to the Social Progress Trust Fund, \$6 million to the Organization of American States, and \$100 million to AID's participation in the program. The financial resources of the Trust Fund are used to bring about improved land use and land settlement, to provide housing for low income groups, to develop community water supply and sanitation facilities, and to advance education and training.

The IDB has loaned more than \$27.4 million for education and training, benefitting 26 universities and two research institutions. The IDB's 15th loan, approved on October 16, 1964, was for a dollar equivalent of \$1.25 million to the School of Public Health, University of Chile for expansion and equipment (\$750,000 for purchase of scientific equipment, material and services for laboratories; \$50,000 for purchase of technical publications; \$450,000 for building construction costs). Total cost of the School of Public Health project is \$2.3 million, of which the Fund loan covers 54 percent; the University of Chile is financing the remaining 46 percent. It is anticipated that the Fund will consider more requests in the future from medical schools, schools of public health, and other institutions of higher learning related to medicine and public health.

The loans for community water supply and sanitation projects and programs totalled \$209.8 million as of December 31, 1964, comprising \$68.6 million from the Bank and \$141.2 million from the Social Progress Trust Fund. (This represents more than 30 percent of the money loaned by the IDB.) Total cost of these programs is estimated at \$450 million. The countries involved are: Argentina, Brazil, Colombia, Costa Rica, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Nicaragua, Panama, Peru, Uruguay and Venezuela. It is estimated that after completion, the projects and programs being financed by the Fund will benefit more than 18 million people, and those by the Bank an additional 12 million people.

The Social Progress Trust Fund has been replenished during the past two years by additional Congressional appropriation (\$131 million in early 1964), to a total in October 1964 of \$525 million. In 1965 the Congress approved \$750 million to be allocated over a three-year period, \$250 million a year.

D. United States Government Departments, Institutions and Agencies Supporting International Health Programs or Related Activities

There are more than 20 major United States Government departments, institutions or agencies involved directly or indirectly in support of international health and sanitation programs (Table 5). In fiscal year 1959, it was estimated by the Senate Subcommittee on Reorganization and International Organizations that \$123 million of United States Government support was provided for international health programs. In fiscal year 1965, it is estimated that the amount will

exceed \$175 million, exclusive of the Food for Peace Program, foreign currencies generated by repayment of loans and the sale of agricultural surpluses under Public Law 480, and the funds made available through the international lending agencies.

There are three major U. S. Government departments or agencies providing technical assistance overseas. These are the Department of Defense, the Agency for International Development (AID), and the Peace Corps. Primary support for the technical assistance programs of AID is provided by the U. S. Public Health Service which not only assigns people on reimbursable detail to AID , but the Public Health Service also assumes full responsibility for the implementation of specific projects in the developing countries under Project Agreements with AID. In addition, the Public Health Service has direct operations overseas in foreign quarantine and research, it makes its personnel available for short and long term assignments to WHO and PAHO and it provides medical officers to the Peace Corps to provide medical care to the volunteers. The Public Health Service has only limited legislative authority to directly carry out technical assistance programs overseas for the benefit of developing countries; this authority rests primarily with AID and the Peace Corps.

TABLE 5

UNITED STATES GOVERNMENT DEPARTMENTS, AGENCIES AND INSTITUTIONS SUPPORTING
INTERNATIONAL HEALTH PROGRAMS OR RELATED ACTIVITIES

1. Department of State
 - a. Office of International Organizations
 - b. Agency for International Development
 - c. Peace Corps
 - d. Bureau of Educational and Cultural Affairs
2. Department of Defense
 - a. Armed Forces (Army, Navy, Air Force, Marine Corps)
 - (1) Military Assistance Program
 - (2) Direct Operations of Armed Forces
 - b. Other (Advanced Research Projects Agency)
3. Department of Health, Education and Welfare
 - a. Public Health Service
 - b. Vocational Rehabilitation Administration
 - c. Children's Bureau (Welfare Administration)
4. Department of Agriculture
5. Department of the Interior
6. Department of Commerce
7. Department of Labor
8. Atomic Energy Commission
9. National Science Foundation
10. Veterans Administration
11. Smithsonian Institution
12. Export-Import Bank

1. Department of State

The State Department is responsible for the development and execution of U. S. foreign policy. The two major agencies functioning under the State Department which support programs of technical and/or economic aid in health and sanitation are the Agency for International Development (AID) and the Peace Corps. Although both operate within broad policy guidelines determined by the State Department, they have operated with a great deal of independence in terms of programs. In addition, The Office of International Organizations and The Bureau of Educational and Cultural Affairs play a significant role in programs of international cooperation.

a. Office of International Organizations

The relationships between the United States and the UN, the specialized agencies and the many other international organizations supported by the United States are carried out by the Office of the Assistant Secretary of State for International Organizations. This office is responsible for the regular or assessed contributions of the United States to the specialized agencies of the UN. The voluntary contributions to UNICEF, the UN Special Fund, the Expanded Programs of Technical Assistance, UNRWA, WHO and PAHO are authorized and appropriated in the Foreign Assistance (AID) legislation. In fiscal year 1963 the United States contributed \$240.8 million to 54 different organizations and 21 special programs. (See III a. and b.)

b. Agency for International Development

The Agency for International Development (AID) is the principal United States agency which administers the bulk of bilateral technical and economic assistance programs, including those in health and sanitation.

In order to describe the present scope and character of the health and sanitation projects supported by AID, it is necessary to review briefly the operating principles of the Agency. The Foreign Assistance Act of 1961 created AID to carry out programs of economic and technical assistance as part of an integrated program of development. The creation of AID from the pre-existing International Cooperation Administration and the Development Loan Fund gave organizational expression to the focus in the U. S. supported programs to long range development goals. The foreign aid objectives were sharpened and programs were planned within a careful analysis of each country's needs, its resources and its prospects for development.

The role of health and sanitation programs within the broad context of international cooperation and the U. S. foreign aid program was well described by The Honorable David E. Bell, Administrator of AID, in an address to the Third National Conference on World Health. He stated:

"In spite of these many changes in the U. S. foreign aid program, the fundamental ideas that underlie it have not changed. One is the concept of our objective. Today, as in the days of the Marshall Plan, we are seeking to help other countries establish themselves as

independent, self-supporting nations, able to make economic and social progress through free institutions. To accomplish this end -- to establish a community of independent free countries -- we believe to be in the deepest interests of the United States.

"The second fundamental idea underlying our foreign aid programs is the idea of aided self help. What we want to do is to help other countries solve their own problems. We want to assist them temporarily, while they are organizing themselves, training their people, learning to mobilize their own resources. Presently they will be able to proceed on their own, and to achieve progress by themselves. I do not in any sense belittle the effort that will be required -- the years of steady, hard effort -- to assist some of today's underdeveloped countries to achieve the capability for self-sustaining progress. But I insist on the fundamental concept that our foreign aid program is a temporary supplement to the self help of others.

"These fundamental ideas about our foreign assistance programs, it seems to me, have direct application in the health field. It should be our purpose, I would think, in seeking to assist the people of underdeveloped countries with regard to health to do two main things:

- to help them act to meet their most immediate health problems -- of which the most conspicuous are malaria and the water-borne diseases -- and

- to help them create the trained personnel and the functioning institutions to enable them progressively to overcome their health problems. The most urgent of these institutional changes are generally taken to be those which are concerned with training health personnel, those concerned with the provision of public health services, and those concerned with the study of a nation's health problems and with planning how to meet them."

The allocation of the economic and technical assistance resources made available through AID is guided by the following broad, general characteristics: (1) the country's economy, political structure, social institutions and security conditions; (2) the effectiveness with which the country is using or can use, available resources to promote social and economic development; (3) the country's need for assistance; and (4) the availability to the country of assistance from other countries and international agencies.

The support to developing countries provided by AID is administered by Country Teams under the direction of a Mission Director. The technical personnel are in various divisions within the AID Mission under the overall direction of the Mission Director. There is a country desk (e.g., India, Brazil) within a Regional Bureau (e.g., Latin America) which serves as the focal point for coordinating the country program support within the AID headquarters in Washington, D. C. The four major Regional Bureaus of AID are: Latin America (Alliance for Progress); Africa; Near East South Asia; and Far East. Within each regional bureau is a technical support staff which includes public health specialists. There is also a central Health Service in the Office of Technical Cooperation and Research which serves as the focal point for coordination, liaison with other government agencies and private organizations and which provides staff service to the AID Administrator with respect to health program policies and the regional bureaus and AID Missions with respect to program operations.

Once the basic decisions regarding the type of assistance (military, economic, supporting) are made there are many considerations regarding the details of country assistance programs that are dependent on the levels of economic, social, political and human resource development within the country. In the early stages of economic development there are almost an infinite number of needs but priority is usually given to education, agriculture, public health, water and natural resource development and basic facilities for transportation and communications. These programs are ordinarily required to enable a country to create and effectively use capital and the modern technology required for full economic development. As incomes begin to rise and mortality rates decline there is likely to be a critical need for food because of rapid rates of population growth which may outstrip rates of growth in agricultural production and the effective distribution of available food resources. The food need is particularly critical for infants and preschool children. In the later stages of development money is needed for capital goods, raw materials and the other requirements of an industrializing economy.

The country programs supported by AID involve more than 70 countries. The programs of economic aid are emphasized in 32 countries, but they are concentrated in 7 countries; military aid programs are concentrated in 11 countries bordering on the Sino-Soviet bloc; and programs of supporting assistance are provided in 7 countries, but they are concentrated in 4 countries.

There are 32 countries that receive almost 90 percent of all development loans which constitute the great bulk of economic development assistance. These are countries that are judged to have good prospects for attaining self-sustaining economic growth within a reasonable time if they make effective use of the resources available to them. These countries fall into three groups:

1. Countries approaching self-sustaining economic growth such as Venezuela, Mexico, Israel, Greece and the Republic of China (Taiwan). Although technical assistance has been an important component of U. S. support in several of these countries it is currently of minor importance and AID is not supporting any health or sanitation projects directly in these countries. The United States has for many years and continues to provide local currency in Taiwan to support priority health programs.

2. Countries following reasonably effective development policies and making progress toward self-sustaining economic growth such as India, Pakistan, Turkey, Colombia and Nigeria. In all the countries in this category health and sanitation projects have received support.

3. Countries with the potential for long-range economic growth, but in which adequate self-help measures are not being demonstrated. There are 11 countries in this category. In most of these countries health and sanitation projects have been, or are being, supported by AID.

The health and sanitation programs supported by AID or predecessor agencies have sometimes made a very significant contribution

to development in these countries. The malaria eradication program in India is one such program. In India more than \$71 million in development grants and loans has been provided for the purchase of DDT, motor vehicles, and scientific equipment as well as for the provision of U. S. technicians in the malaria eradication program. In addition, the U. S. has financed \$111 million equivalent of Indian rupees for local costs of the program. These funds are generated by the sale of surplus U. S. agricultural products (Public Law 480).

Many other important health programs or projects have been supported in these countries. In 1963 and 1964 over \$18 million in development loans were made available to Pakistan for support of the malaria eradication program. In Turkey both private and government support has been provided for the development of nursing education. In Tunisia and Nigeria important development loans have been made for the construction of water supplies in major cities. In Colombia technical cooperation and development grants have provided significant assistance for medical and nursing education and loans have financed water supply and sewerage projects. Major program support for malaria eradication, rural health service and water supply projects has been given in Iran, Thailand and Brazil.

The programs in countries that are receiving basic support for security and stability are funded primarily from special funds called supporting assistance. There are seven countries of importance in this category. In fiscal year 1965 it is estimated that 80 percent of the funds will be spent in Vietnam, Laos, Korea and Jordan. In fiscal year

1965 the largest AID health program in terms of dollar grants and personnel will be in Vietnam. The focus of the program is on medical care with emphasis given to rural health services and provincial surgical teams for the treatment of civilian casualties of the insurgency. In addition, programs for the development of health manpower and the eradication of malaria will continue to be supported. The program in Laos has emphasized rural health services, sanitation and basic health education. The health and sanitation program in Jordan has included malaria eradication, environmental sanitation and rural health services. In the past Korea has had significant support for public health and medical education programs.

There is another large group of countries, actually almost half of those receiving U. S. assistance, in which the commitments are generally quite limited. This includes 37 countries that receive only 10 percent of all economic aid. For the most part the U. S. is a minor contributor to a program in which European countries or international agencies are the dominant element in economic aid or technical assistance. In general, few health and sanitation projects of major significance have been supported in these countries. In these countries the U. S. support in public health is made primarily through its support of WHO and UNICEF. An example of this type of support are the grants that have been provided by AID to several African countries to finance WHO health planning teams.

The support for health programs provided by AID will ordinarily be determined by the following factors: (1) the degree to which

preventable infectious diseases, malnutrition or rapid rates of population growth prevent or seriously inhibit economic development and/or the development of human resources; (2) the stage or degree of economic and human resource development within the country; (3) the priority assigned to health programs or projects by the host government; (4) the attitude and knowledge of the USAID Mission Director, Program Officers and Public Health Advisors as well as the Technical and Program personnel in the Regional Bureau offices in AID/Washington; (5) the need for impact social welfare programs (e.g., medical care) in situations of political unrest, insurgency or disaster; (6) the economic and human resources that can be invested in health programs; (7) the availability of assistance from international agencies (e.g., WHO, UNICEF) or other developed countries, and (8) the general principles applicable to all AID assistance.

Priorities in health programs supported by AID are generally based on the demonstrated ability of the health programs to do the following: (1) contribute to political objectives by reaching large numbers of people, such as the malaria eradication program in India, or groups in particular need such as the civilian casualties in Vietnam. Measures that bring better health to the whole population, or a large segment of it, lay a basis for a broader distribution of political power, for where only the elite are healthy and vigorous and most of the people are lethargic from sickness, power tends to remain concentrated and democratic institutions are not likely to develop; (2) contribute to economic and social development by improving the physical strength, energy, learning ability, morale or motivation of a significant number

of people; improving the environmental conditions; and by eliminating health hazards and improving the potential for the development of agriculture, water and other natural resources; (3) demonstrate our humanitarian interests. This may be done through programs of disaster relief, medical care, rehabilitation, communicable disease control or child feeding.

One of the most significant U. S. contributions in international health during the past twenty years has been its support of world-wide malaria eradication. Another major program aimed at an immediate health problem is the world-wide program to provide an adequate water supply for the world's growing population. One of the major benefits of such a program is the reduction of morbidity and mortality from water-borne diseases. The program for community water supply development and sewerage and waste disposal is now the largest, in financial terms, of the health programs supported by AID. During the last four years more than \$392 million of external financial assistance has been provided to economically developing countries for water supplies. The Agency for International Development has provided \$104 million, the Inter-American Development Bank (funds primarily from U. S.) \$182 million, and other international lending agencies \$106 million. It is estimated, based upon a large number of available figures, that local expenditures (within developing countries) are at least as great as the money borrowed. Thus the projects for which the loans were made represent a program of \$775 - \$800 million.

The development of health manpower has been one of the strongest and most significant activities in United States supported technical assistance programs. Throughout the years these programs continue to have a high priority in AID. The number of health people trained each year has remained relatively stable as the programs have continued and the guiding principles have remained essentially the same, namely, to send a small number of leaders or potential leaders in various professional disciplines to the United States for graduate or advanced study and to promote the training of the bulk of the manpower needed to provide the variety of services required within the countries themselves. There have not only been between 300 and 400 AID financed participants in health fields receiving specialized training in the United States every year but support has been given to the development of medical, nursing, public health and other institutions in the developing countries. There are, at present, seven AID financed university-to-university relationships and a variety of others involving direct-hire AID advisors. The creation of institutions for education and training would be to little avail if mechanisms for the effective utilization of personnel did not exist. To overcome some of the obstacles to placement of trained personnel AID and predecessor agencies have given assistance to Ministries of Health to improve the organization, administration and financing of health services, community water supply systems and other program activities.

The major types of health and sanitation activities supported by AID and predecessor agencies have emphasized environmental sanitation,

malaria eradication and health manpower development (Tables 1 and 6). In the future more emphasis will be given to nutrition and family planning because of the increasing importance in many developing countries of malnutrition in preschool children and rapid rates of population growth in the developing countries.

TABLE 6
SUMMARY OF HEALTH AND SANITATION PROJECTS PROGRAMMED FOR
SUPPORT BY THE AGENCY FOR INTERNATIONAL DEVELOPMENT IN
FISCAL YEAR 1965

<u>Type of Project</u>	<u>Number of Projects</u>
Community Water Supply	23
Rural Health Services	18
Malaria Eradication	16
Medical Education	10
Nursing	9
Public Health Administration	7
Health Education	6
Communicable Disease Control	6
Sanitary Engineering	5
Training of Auxiliary Health Workers	5
Other	5

The total funds, dollars and local currency, made available by AID to support health and sanitation programs has shown a steady increase in recent years. This increase is due primarily to the increased use of local currency, but even the dollar contributions have been substantial (Table 7).

TABLE 7

AID Dollar Contribution and Withdrawals for Country Use of
Counterpart Funds and U.S. Owned Local Currency
(Millions of Dollars or Dollar Equivalent)
1956 - 1965

<u>Category</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>Estimated 1965</u>
Dollars	34.2	45.6	45	38.3	48.7	48.2	63.4	88.5	67.3	48.5
Dollar equivalent in local currency	5.7	3.7	5	15.6	36.0	1.9	78.9	67.4	118.8	48.1
Total	39.9	49.3	50	53.9	84.7	50.1	142.3	155.9	186.1	96.6

It is of interest while the financial contributions by AID have increased, the technical assistance which AID provides has gradually declined. The total number of United States technicians in health and sanitation programs financed by AID declined from 366 in 1960 to 328 in 1962 and it has further declined to 215 in 1965. This downward trend in technical assistance may be changing. During the past year, the number of U. S. Public Health Service people working overseas or in direct support of AID health programs has increased from 144 in July 1964 to 177 on March 1, 1965. This number is expected to increase to at least 240 by June 30, 1965. The decline in U. S. technical assistance has been particularly marked in Latin America where the U. S. has strongly supported technical assistance programs in health since 1942. The number of AID health and sanitation advisors in the region has declined from 93 to 25 since the reorganization of the foreign aid program in 1961. The financial support from AID and through the multi-lateral and regional organization has increased markedly during the past

four years. The technical assistance capabilities of the Pan American Health Organization have been further strengthened during this period following the resolutions appended to the Charter of Punta del Este in 1961 which recommended "that governments, whenever they consider it advisable, utilize the technical advisory services of the Pan American Sanitary Bureau, Regional Office of the World Health Organization....." Thus, although there has been a decline in U. S. professional advisors in the field, the total technical and financial resources available to Latin American countries seeking assistance in health and sanitation projects has steadily increased.

The U. S. Public Health Service (PHS) has been working closely with the African Regional Bureau of AID to develop cooperation projects in Liberia and Somali. When fully implemented, these programs will require about 30 PHS officers in the field. In addition, the PHS worked closely with the Bureau and the OCCGE on the West African regional measles immunization program.

The requirements in the Far East have been unique because of the counterinsurgency program and the large number of civilian casualties in Vietnam. In Vietnam the Public Health Service and the Armed Forces have provided AID with surgical teams, general practitioners, medical and public health administrators, nurses and other professionals required for the expanded medical care and rural health programs. In both Korea and Thailand the senior AID Public Health Advisors are PHS medical officers.

The health and sanitation programs supported by AID in the Near East South Asia Region have been reduced in terms of technical assistance, particularly in Iran. There has, however, been strong support for malaria eradication and medical education. In the future increased emphasis will be given to malnutrition and family planning.

The regional difference in technical assistance is also present in terms of AID bilateral dollar support for health and sanitation projects (Table 8).

In addition to the programs of the regional bureaus there are several significant non-regional projects. The most important of these in financial terms is the support for American schools and hospitals abroad. This is a program with long range development objectives which has provided a significant support for Project HOPE, the Medical Center of the American University of Beirut, the Admiral Bristol Hospital and Nursing School in Istanbul. A centrally funded research program has both long range objectives and immediate program improvement goals. The other centrally supported activities, such as those with PHS, American Hospital Association and Association of American Medical Colleges, are primarily to provide technical consultation services for AID overseas missions and the programs which they support.

TABLE 8
FUNDING ESTIMATES FOR AID SUPPORTED HEALTH AND SANITATION
PROJECTS IN FISCAL YEAR 1965

<u>Regional</u>	<u>Dollars</u>	<u>Local Currency</u>
Far East	\$10,607,000	\$12,100,000
Africa	5,056,000	6,264,000
Near East South Asia	3,509,000	29,578,000
Latin America	14,177,000	239,000
<u>Non-Regional</u>		
American Schools and Hospitals Abroad	12,250,000	
Research (Health Related)	1,000,000	
General Technical Support		
U.S. Public Health Service	675,000	
American Hospital Association	31,000	
Association of American Medical Colleges	54,000	
University Contracts	850,000	
Administrative	250,000	
Total	<u>\$48,459,000</u>	<u>\$48,181,000</u>

c. Peace Corps

The Peace Corps is one of the three major U.S. governmental agencies authorized to provide direct technical assistance in the developing countries. The Peace Corps has, at present, a limited number of volunteer staffed medical and public health programs in 13 countries. At present there are about 250 volunteers in these projects in Thailand, Malaysia, Pakistan, Turkey, Ethiopia, Togo, Sierra Leone, Tanganyika, Malawi, Brazil, Bolivia, Colombia and the Dominican Republic. These volunteers are nurses, laboratory technicians and paramedical personnel. There are, in addition, over 70 Public Health Service medical officers assigned in 46 countries to provide medical care and preventive services to Peace Corps Volunteers. In addition, there are 8 Public Health Service staff members at Peace Corps Headquarters in Washington. Peace Corps Volunteers receive no salaries as such. The overall cost, including administrative training, travel, and in-country living allowances is approximately \$8,000 per volunteer per year. Supplies given to volunteers seldom exceed \$500 in two years. The overall investment in health programs in 1964 was approximately \$2.5 million. The Peace Corps has initiated a gradual build-up in the number of volunteers serving overseas in medical and public health programs. There are 15 new physician volunteers who will begin training in the summer of 1965. The number of volunteers in Thailand working in the rural health and village sanitation program is being increased three-fold to approximately 40 volunteers and there is now a high level Peace Corps physician devoting fulltime to medical programs and physician recruitment. In a recent speech Mr. Shriver, the Director, indicated the Peace Corps goal was 500 physician volunteers and a total of 5000 volunteers in medical and public health programs.

The role of the Peace Corps volunteer is quite different from that of an AID or WHO Advisor because they are generally involved in the non-expert provision of services. The physicians will devote a portion of their time to curative medicine, a portion to preventive medicine and the majority to education in health. They receive wages that are little, if any, above the people with whom they work and their purpose is less technical than it is the broadly cultural one of better understanding among people. The volunteer clearly benefits as does the United States from the program.

d. Bureau of Educational and Cultural Affairs

The international program for educational and cultural exchange administered by the Bureau of Educational and Cultural Affairs consists primarily of grants to individuals and institutions involving approximately 2000 United States citizens and 6000 citizens from more than 120 foreign countries and territories each year. The program, authorized by the Fulbright-Hays Act of 1961, is conducted to increase mutual understanding between the people of the United States and the people of other countries by means of educational and cultural advancement, and to assist peaceful relations between the United States and other countries. There are a limited number of physicians and other health professionals who participate in this program every year.

e. Other

There are other types of bilateral cooperative efforts in the field of public health, such as the International Joint Commission established by treaty between Canada and the United States which takes a very strong interest in water pollution control along the entire U.S.-Canada border and in which the Public Health Service gives technical assistance to the Department of State.

2. Department of Defense

A. Armed Forces

(1) Military Assistance Programs

The Department of Defense Military Assistance Program, funded under the Foreign Assistance Legislation, is supporting civic action projects in more than 25 countries. Civic action projects are those which the military forces undertake to contribute to the economic and social development and strengthen the ties between the military and civilian communities. Although these activities are of relatively recent origin in U.S. foreign aid the U.S. Army has for many years contributed to many engineering projects that promoted development in this country. In addition, the Armed Forces have for many years been available in disaster relief and related civic action projects in the United States.

The Military Assistance Program (MAP) includes training programs in the United States and abroad, civic action projects and direct financial and technical assistance to the Armed Forces of other countries.

In the area of training, for example, the U.S. Air Force Medical Service offers a broad program of medical training. Participating nations may place students in all formally conducted courses for officers and airmen at the Medical Service School, Gunter Air Force Base, Alabama, and the USAF School of Aerospace Medicine, Brooks Air Force Base, Texas. In addition, observer training (on-the-job) is available in most medical specialties at USAF teaching hospitals. During fiscal year 1964, 208 students received medical training under the Air Force's Military Assistance Program at a total cost

of \$287,490. In fiscal year 1965 it is expected that about the same number of people will receive training under this USAF program. The Army and the Navy conduct similar programs of training under the MAP program.

A special preventive medicine civic action program is conducted by the U.S. Air Force Southern Command (USAFSO) at Albrook Air Force Base in the Canal Zone. The first class, graduated in December 1963, included 45 students from 9 countries, including Bolivia, Paraguay, Venezuela, Panama, Dominican Republic, Honduras, Guatemala and Ecuador. This program provides for training of medical personnel from Latin American countries in preventive medicine (e.g., immunization), sanitation, first aid and medical care. The program provides for the use of aircraft to give the teams a mobile capacity and permit them to reach people living in villages in remote areas. The second class, in 1964, had 34 students from 8 countries. Future programming indicates an expected output of approximately 75 students per year through 1969. In addition to the training the U.S. Air Force provides medical supplies and equipment to the participating countries. The initial funding for this project was \$250,000 with the eventual cost estimated to be \$6.3 million.

The Military Civic Action Program (MAP) supported civic action projects in 9 countries in fiscal year 1962, in 24 countries in fiscal year 1963 and 1964. It is likely that this program will be further expanded in the future. Where there has been an absolute requirement for United States assistance in order to launch a project, United States financing is divided between MAP and AID. The financing by MAP takes the form of equipment and training support and AID helps to finance such costs as supplies (e.g., bandages, drugs).

At the request of the American Embassy, Saigon, the Department of the Army was directed to initiate a military Medical Civic Action Program (MEDCAP) in the Republic of Vietnam (RVN) in January 1963. The primary purpose of the program was to fill the critical void in medical care available to the Vietnamese people living in the rural and often isolated areas. In coordination with the United States AID Mission and the Minister of Health, Republic of Vietnam, US and RVN military personnel were organized into mobile medical teams which provide medical care for the remote villages and hamlets. These medical teams also train local villagers as health workers so each village and hamlet can operate its own health station. In addition to alleviating the critical medical situation, this program has increased the prestige and improved the image of the US and RVN military forces in the eyes of the rural Vietnamese people.

The Surgeon, United States Military Assistance Command, Vietnam (MACV) supervises the US Army MEDCAP organization which consists of 18 mobile medical teams comprising 65 medical personnel. During this past year, these teams in conjunction with their RVN military and paramilitary counterparts have provided treatment to approximately three million people.

Closely allied to the functions of the MEDCAP are the 109 US District Advisory Teams that are located throughout most provinces of RVN. Each team consists of two officers and three enlisted men, one of the enlisted men being a medical specialist who provides medical advice and treatment to RVN paramilitary personnel (Civil Guard, Self Defense Corps). Insofar as possible, the medical specialist provides medical care to the dependents of paramilitary forces and to the local civilians.

In addition to providing medical care and hospitalization for US personnel in Thailand, the 31st Field Hospital continues to conduct an active medical Civic Action Program by sending mobile medical teams to treat the people living in the remote village areas. These teams treated approximately 10,000 people during 1964. Since no Thai physicians practice in the villages visited by the teams, the program has done much to improve the general health of the villagers and the Thai-American relationships.

In June 1963 a U.S. Army medical team went to San Joaquin, Bolivia, to assist a U.S. National Institutes of Health Research Team in the study of serious hemorrhagic fever outbreak which is obstructing efforts to colonize that area. Recently, the U.S. teams left San Joaquin as Bolivian personnel were adequate to care for the decreased patient load, and the research effort shifted to attempt vaccine production. The Army Medical Service has awarded a research grant to Dr. R. C. Van Gelder, American Museum of Natural History, New York, to study vectors and reservoirs of arthropod-borne diseases in South America. This study will include the area of Bolivia where hemorrhagic fever is prevalent.

The presence of pinta, a chronic skin disease, in the Alto Reni region of Bolivia has also caused difficulty in the colonization of this region. In April 1963 a civic action operation to eradicate pinta with penicillin was initiated by a U.S. Army medical team. A systematic search for the disease was conducted and all patients and their contacts treated.

In May 1963, a civic action project in Bolivia included an Army Medical Service sanitary engineer who reorganized the Department of Community Water Supplies and fresh, potable water is now provided to many towns for the first

time. One medical team instructed military aidmen and civilian sanitary inspectors, and initiated efforts to establish dispensaries in rural areas which have never had medical care.

Since World War II, a U.S. Army Veterinary Corps officer has been assigned to the military mission to provide guidance in agronomy and animal husbandry practices and train Bolivian Army personnel in food inspection procedures. A second U.S. Army Veterinary Corps officer was assigned six months ago to establish a veterinary laboratory.

Some of the United States aided civic action programs include health and sanitary projects. The major types of projects are provision of medical services to civilians in remote areas (Chile, Iran, Vietnam); construction of hospitals, health centers and dispensaries (Colombia, Korea, Thailand); community water supplies and sanitation (Ecuador, Guatemala, Korea, Thailand, Vietnam, Jordan); disaster relief (Iran, Pakistan); provision of medical equipment and supplies (Korea, Thailand, Vietnam); and training (Bolivia, Venezuela).

(2) Direct Operations of Armed Forces

The primary mission of the medical services of the Army, Navy and Air Force is to protect the health of United States military personnel who are deployed within the United States and overseas in support of national policy. The Army has the major responsibility in terms of numbers of military personnel that may be deployed overseas, particularly in the tropical areas. In order to provide adequate protection for the troops, the Army has developed an excellent preventive medicine program, and it is one of the most important government agencies supporting research in tropical medicine. The Army carries out its tropical medicine research program through fixed overseas research

facilities, field teams, the assignment of personnel to other agencies, the maintenance of one of the major United States research centers at Walter Reed Army Institute of Research, and it supports extramural research programs through grants and contracts with U.S. universities and research institutes and through contracts with foreign universities. The Army currently invests about \$7 million in its own research activities and an additional \$5 million in its extramural grants and contracts program.

The U.S. Air Force has a smaller program in preventive medicine. The 4th Epidemiological Flight, U.S. Air Forces in Europe has conducted epidemiological surveys which have been used in a recent health manpower survey in Turkey. Reports of health conditions in other countries of the Middle East have been of similar value to the U.S. as well as developing countries.

The 5th Epidemiological Flight, Pacific Air Force has headquarters in the Philippines. A pest control school was initiated by the Flight in 1959, and courses have been conducted in Japan, the Philippines and Hawaii. Individuals from Japan, South Korea, Okinawa, the Republic of China (Taiwan) and the Philippines have attended. The activities of this Flight have a direct and indirect influence upon the health of Filipinos and others in Southeast Asia. The Flight is training Filipino technicians in epidemiology and public health laboratory procedures, including virological laboratory work. Technical training in environmental sanitation is planned. Taxonomy of mosquitos is in progress.

Air Force veterinary officers are assigned to the Foot and Mouth Disease Center in Brazil and the Onderstepoort Veterinary Research Laboratory in South Africa. In addition, the Air Force has provided advice and technical assistance

to the governments of Chile, Columbia, Australia, Republic of China (Taiwan) on hospital planning, design and construction.

The Navy is faced with problems that differ from both the Air Force and the Army in terms of the hazards faced by its personnel. In order to develop a better understanding of the health problems that are likely to face Naval personnel in the Far East and Mediterranean theater, the Navy maintains a Naval Medical Research Unit (NAMRU) in Taipei, Taiwan and in Cairo, United Arab Republic. These units have contributed significantly to the understanding of Cholera, hemorrhagic fever, malnutrition and other important diseases.

There are special Naval Preventive Medicine Units in Hawaii and in Naples, Italy. These units provide a variety of specialized services to shore based and seagoing Naval units in the Pacific and Mediterranean theaters and they provide, on request, preventive medical services to foreign countries. For example, a team from Naples spent several months in Ethiopia assisting in the control of yellow fever and in indoctrinating local medical personnel in prevention and mass immunization procedures.

At any given time, the Navy has from 6 to 12 medical personnel working in short term assignments throughout the world, wherever the need may arise. These are not programmed ahead of time, but are responses on the part of the Navy to requests from foreign governments. In recent years the Navy has assigned senior medical officers to assist the governments of South Africa, Japan and the Republic of the Philippines in the control of leprosy; to help the Sudan in the control of yellow fever; to assist the government of Iran in the control of a Cholera outbreak; and to assist the government of Honduras on the control of an outbreak of gastrointestinal disease. The Navy has also

provided technical assistance in health and sanitation through Seabee Stat Teams that include medical personnel.

The U.S. Naval Medical School of the National Naval Medical Center, Bethesda, Maryland, annually trains about 15 foreign physicians from 28 different countries in public health and administrative medicine. In addition the school trains a certain number of laboratory and X-ray technicians and it provides technical manuals to foreign countries. Foreign technicians also receive training in the Preventive Medicine Technicians Course, located at the U.S. Naval Hospital, Oakland, California.

These various activities cost the Navy an estimated \$500,000 - \$750,000 per year. In addition, local currencies generated by the sale of U.S. Agricultural surplus (Public Law 480) are available in the Republic of China (Taiwan) and the United Arab Republic to support the research programs of the Naval Medical Research Units.

(3) Assignment of Personnel to Other Agencies

The Department of State requested the Department of Defense to provide military professional medical personnel to support the greatly expanded civilian "counter-insurgency program" under the auspices of the United States Overseas Mission (USOM) in the Republic of Vietnam. As a result, the Army Surgeon General was directed to provide in December 1964, six Medical Corps and six Medical Service Corps officers to USOM on a loan basis for one year. The Medical Corps officer requirement was filled on a voluntary basis. The Navy and Air Force have each provided one volunteer surgical team for this program.

Army nurses have contributed greatly toward improving the health and welfare of the Vietnamese people. In addition to providing nursing care for the US sick and injured, they are involved in assisting in civilian mercy missions and mass immunization programs; teaching and serving as advisors in Nursing Services of RVN hospitals; teaching preventive health and sanitation measures; and volunteering their services to help the needy orphans and the other under-privileged people in the local villages and hospitals.

B. Other (Advanced Research Projects Agency)

In addition to the Military Assistance Program and the direct operations of the Armed Forces, the Department of Defense supports research and field studies related to its primary mission. The Advanced Research Projects Agency (ARPA) will provide over \$4 million to support nutrition surveys, the development of field rations, the preparation of food composition tables and other studies related to public health problems in developing countries. The nutrition studies have been carried out by the Interdepartmental Committee on Nutrition for National Development (ICNND) which has conducted studies in more than 25 countries during the past 10 years.

3. Department of Health, Education and Welfare (HEW)

The Department of Health, Education and Welfare (HEW) participates in international programs of public health, medical care, training, research and rehabilitation through the Public Health Service, the Vocational Rehabilitation Administration and the Children's Bureau of the Welfare Administration.

a. Public Health Service (PHS)

The Public Health Service is the primary U.S. Government resource in the field of international health. It cooperates with national and international

agencies, governmental and private, by providing information, expert advice, technical assistance and financial support to international programs of public health, training and research. It provides support to the World Health Organization and the Pan American Health Organization.

The Public Health Service (PHS) is the official technical liaison of the U.S. Government with the World Health Organization. Beginning with the first World Health Assembly, the Surgeon General of the PHS has served as Chief U.S. delegate to each of the 18 World Health Assemblies except one, and PHS medical officers have been the U.S. designated members to the Executive Board. There are more than 90 PHS specialists who are members of WHO expert advisory panels in 39 fields. There are, in addition, many officers who are serving with WHO and PAHO under special arrangements with the PHS.

The Public Health Service has actively participated in the bilateral health and sanitation programs supported by the U.S. Government in many countries since World War II. At the present time there are 178 PHS Officers or Civil Service personnel currently engaged in AID activities either overseas or through direct program support in the U.S. It is expected that this number will increase to about 250 by the end of fiscal year 1965. There are, in addition, 78 PHS medical officers and other officers assigned to the Peace Corps to provide medical service to the volunteers and to provide technical support in special fields (e.g., public health nursing, health education).

The International Health Research Act of 1960 explicitly recognized the importance of international medical research activities to progress of health research in the United States. Under previously existing legislation, a considerable amount of health research and research training had been carried

out in other countries as part of the regular programs of the NIH categorical institutes. Such international projects took advantage of unusual research conditions or material or outstanding abilities in advancing the health sciences in the U.S. The 1960 Act permitted some expansion of these activities by authorizing the use of foreign currencies available in a few countries from sales of surplus U.S. agricultural products under P.L. 480. But most of the PHS international research and research training activities continue to be undertaken as part of the domestic programs and are concerned with the health of the American people rather than the benefit of the country where the research is carried out. This support has not only added to the general body of medical knowledge but in many countries it has helped create a climate which has generated new sources of support for scientists and research institutions.

The Act of 1960 also recognized a permanent U.S. interest in international cooperation "to advance the international status of the health sciences" and gave authority to the President to carry out "cooperative enterprises in health research, research planning and research training." This authority has been exercised by the National Institutes of Health under rather limited and specific delegations, as in the case of grants to WHO and PAHO for the planning of medical research programs.

The types of international activities supported by NIH fall within one or more of three general types: research projects, research training and communication or information exchange.

PHS research grants to investigators in foreign institutions and international organizations amounted to \$12.2 million in fiscal year 1965. Investigators in the developing countries and international organizations

receive approximately 33 percent of these dollar grants. In addition to the dollars provided to support research overseas the NIH, and other units of the Public Health Service, participate in collaborative research with scientists of other countries utilizing local currencies generated by the sale of U.S. surplus agricultural products (Public Law 480, Section 104k). Since this program began in 1961, NIH has initiated support for 71 projects in eight countries. The projects in Brazil, Burma, Poland, Israel, Pakistan, United Arab Republic, India and Yugoslavia had a local currency value equal to \$11.1 million. Sixty-three of these projects are still active. During fiscal year 1965, agreements were signed covering 19 new projects and 6 extensions of existing projects valued at \$3.1 million.

To coordinate and provide proper surveillance of PHS supported research projects abroad and to stimulate an increased flow of scientific information, the NIH maintains overseas offices in Paris, London, Rio de Janeiro, Tokyo and New Delhi. The Public Health Service medical officers in these offices work in close cooperation with the overseas science personnel of the Department of State and other government agencies. Coordination at the Washington level is accomplished by close working relationships with the Office of the President's Science Advisor and through membership on the International Committee of the Federal Council on Science and Technology. The Public Health Service assigns an officer to the Office of International Scientific Affairs in the Department of State and to Geneva to maintain liaison with the World Health Organization.

The National Institutes of Health maintains overseas research laboratories in Ghana and the Canal Zone, and it administers the Pakistan SEATO Cholera Research Laboratory.

At the request of the Government of Ghana, NIH in 1961 organized the West African Research Laboratory in close relationship to the new Ghana National Institute of Health and Medical Research. Collaborative studies of the Laboratory and Institute have brought about important discoveries concerning the Simulium damnosum fly and the distribution of onchocerciasis, other parasitic diseases, Burkitt's tumor, and granulomatous diseases of the lung including tuberculosis. NIH is transferring sections of the laboratory as rapidly as the Institute is able to take over. The transfer will be completed and NIH personnel withdrawn within the next two years.

The Middle America Research Unit (MARU) is a special research laboratory located in the Canal Zone. The staff of MARU has carried out studies of virus and fungal diseases of the tropics. It maintains active professional contacts with cooperating organizations concerned with health and medical research in the countries of Central America, South America and the Caribbean, and it works closely with the Gorgas Memorial Laboratory, the Army Medical Service and the Pan American Health Organization.

Many biomedical research projects supported by NIH in U.S. universities and research institutions or carried out in NIH laboratories, have direct relevance to major disease problems in the developing countries. The National Institute of Allergy and Infectious Diseases, for example, supports projects on arthropod-borne viruses, entero-viruses, rickettsial diseases, zoonoses, tuberculosis and a number of other tropical and infectious diseases. In addition, the other eight NIH Institutes support or conduct research that have direct application to major disease problems throughout the world.

The National Institutes of Health makes a major contribution in the training of international medical research manpower through five separate

programs: (1) Fellowships and traineeships; (2) International postdoctoral fellowships; (3) Training grants; (4) International Centers for Medical Research and Training (ICMRT); and (5) International Research Associates.

The international segment of the NIH overall fellowship program is limited to a small number of U.S. nationals who are awarded grants for study and research in foreign institutions. These fellowships are made primarily for post graduate study abroad under the same rules and conditions as similar grants for domestic institutions. In fiscal year 1964 there were 296 such fellowships awarded with stipends and travel costs amounting to \$2.4 million annually. Among these awards were 30 traineeships for post-doctoral training abroad of American scientists in specialized research techniques or procedures not well developed in U.S. research institutions.

The Public Health Service has always awarded a small number of its fellowships to promising foreign scientists to prepare for careers in biomedical research. This program was expanded in 1958. In fiscal year 1965 appropriation of \$1,200,000 supported 166 fellows. To provide some of the resources needed in starting a career and make optimal use of their U.S. training, the fellows are eligible for research grants up to \$2,500 per year for 3 years following their return to their own country. During fiscal year 1965, \$256,000 was awarded for an initial year's support of 42 research projects of such fellows and for continued support of 53 ongoing projects.

The biomedical research manpower training programs of NIH, undertaken to increase the number of qualified scientists in many domestic categories, are contributing indirectly to development of medical research in other

countries. Approximately 18,000 scientists, predominantly post-doctoral, received stipends under NIH training grants during the academic year 1963-64. Among these were 815 non-citizens who came to the U.S. on exchange visitor or other non-immigration types of visas. Virtually all of this group of trainees from other countries return to their home countries upon completion of one or two years of training to join medical school faculties or research laboratories.

The development of the international centers for medical research and training followed the passage of the International Health Research Act of 1960. These centers were created to advance the status of U.S. health science through cooperative programs. Five centers have now been established through collaborative agreements between U.S. medical schools and a foreign research institution: (1) Tulane University with University del Valle, Cali, Colombia; (2) Louisiana State University with University of Costa Rica, San Jose, Costa Rica; (3) University of California with the Institute of Medical Research, Kuala Lumpur, Malaysia; (4) Johns Hopkins University with Calcutta School of Tropical Medicine and other medical and scientific institutions in Calcutta; and (5) University of Maryland with Institute of Hygiene, Lahore, West Pakistan.

The international centers have two operational elements: (1) a research and research training activity in the United States and (2) research projects and training conducted in the overseas institutions where the American scientists have the opportunity of working in unique environmental, cultural or medical conditions unavailable in the United States. The centers are supported with grants of \$500,000 per year and, at present, a five year commitment for program support has been made by NIH.

A program developed in fiscal year 1963 permits the Public Health Service to assign 8 - 10 commissioned officers abroad to research projects conducted by the Public Health Service or of special interest to the Service. This program provides research experience and training of high quality. The budget for this program is about \$150,000 annually.

Communications in the health and biomedical sciences have become increasingly important to the improvement of world health. A major tool in this field is the international meeting at which personal interchange of information concerning research planned or in progress can take place. During 1964 the Public Health Service provided grants for partial support of 46 international meetings and the Service sponsored, either directly or indirectly with international organizations, meetings on a variety of problems such as nutrition and health education.

One of the most important resources of the Public Health Service in biomedical communication is the National Library of Medicine. The Library, as well as the NIH, supports a large scale program for the translation, abstracting and publication of the medical literature abroad with funds generated by the sale of U.S. surplus agricultural commodities (Public Law 480) and with dollar grants. The Library also supports an inter-library loan program with libraries throughout the world. It has over 1200 formal exchange agreements with other libraries, institutions and governments throughout the world. It distributes its own publications, including the Index Medicus, to these institutions in return for publications of the other institutions.

The Library turns over to the U.S. Book Exchange, Inc., a contracting agency of AID, the large volume of duplicate material (50,000 pieces annually), which it receives from all sources. This material is the principal source of supply for the international exchange of medical publications conducted by the U.S. Book Exchange, Inc.

The other services of the Library, such as the Medical Literature Analysis and Retrieval System (MEDLARS), Photoduplication, preparation of special bibliographies, are available to institutions in the developing countries through an AID financed agreement with the Public Health Service. The Library also works closely with the World Health Organization and the Pan American Health Organization.

Among the oldest activities of the Public Health Service (PHS) have been the quarantine inspection of persons and cargo entering the United States and the medical examination of aliens. In maintaining this program the PHS has had the full support of the World Health Organization. The experience of the PHS in its 85 years of quarantine activities as well as our modern procedures emphasizing the immunization and inspection of travelers, insect and rodent control, and sanitation of conveyances are shared with other nations through the participation of the PHS in meetings of the Expert Committee on International Quarantine convened by the World Health Organization and the cooperative enforcement of international sanitary regulations agreed to by member nations.

The National Center for Health Statistics is another institution of the PHS with an important international program. The Center conducts a series of collaborative studies abroad with other governments financed under Public

Law 480. The Center is now working closely with AID particularly in the field of population studies. One of the great needs throughout the world is for improved vital statistics and the Center is exploring ways to achieve this objective. The Center also works closely with the World Health Organization, particularly on the revision in the International Classification of Disease.

The Bureau of Medical Services, PHS, is involved in a variety of international health activities. In addition to the quarantine program and the medical examination of aliens, the Bureau provides over 70 physicians to the Peace Corps to provide medical care to the volunteers and provides two surgical teams to the AID Mission in Vietnam to treat civilian casualties.

The Bureau of State Services participates directly and indirectly in a variety of international health activities through the Environmental Health Division and the Community Health Division. The Environmental Health Division has detailed officers to the Atomic Bomb Casualty Commission in Japan, it has provided advisory services directly to other governments, it has made engineers available to AID as advisors to a number of developing countries, it has supported research, it has provided experts to work with a number of WHO technical panels, and it has conducted outstanding training programs at the Taft Engineering Center in Cincinnati, Ohio.

The Communicable Disease Center (CDC), Community Health Division, has a special role in international health. Every year several hundred public health workers from countries throughout the world attend training courses at CDC. Since 1946, more than 2,500 public health workers from 97 countries have participated in one or more training courses, seminars and symposiums of CDC.

The Communicable Disease Center conducts a major AID financed program evaluating malaria eradication techniques and insecticides. This program is soon to be expanded with the establishment of a field station in Central America. The Center operates as a part of the WHO world-wide network, the International Influenza Center of the Americas, the Arbovirus Center for the Western Hemisphere and the International Shigellosis Center.

The Communicable Disease Center has made a number of short-term and long-term consultants available to AID for evaluation of epidemics, advisory services in malaria eradication, tuberculosis, measles immunization, poliomyelitis and a variety of other fields.

The Audiovisual Facility of the PHS, located at CDC, is rapidly expanding its program and facilities in response to a growing demand from U.S. domestic institutions. The staff of the Audiovisual Facility have cooperated closely with AID and they have undertaken pilot projects overseas and made consultants available to overseas missions, foreign governments and professional organizations in order to better define the needs in developing countries. The rapid advances in communication technology during recent years has given rise to the hope that these could improve education and training in the developing countries. Several special overseas projects are currently under consideration by AID and the Audiovisual Facility to test the applicability of some of these newly developed methods and devices in medical education and the training of health personnel in the developing countries.

b. Vocational Rehabilitation Administration

There has been little direct participation by the Vocational Rehabilitation Administration (VRA) in AID funded programs because of the low priority

attached to rehabilitation projects in the primarily public health focus of AID and predecessor agencies. The dramatic success of UNICEF, WHO and voluntary agency funded activities has demonstrated the clear value of these programs in both humanitarian and economic terms. It is cheaper to rehabilitate an amputee than have him remain an unemployed cripple.

The Vocational Rehabilitation Administration has worked closely with U.S. specialists consulting abroad for WHO, UNICEF, governments or institutions; it has sponsored research; and it has programmed visiting scholars and students in hundreds of U.S. institutions.

Outstanding among the rehabilitation research projects supported by the VRA are India's studies of the medical, surgical and vocational rehabilitation of patients with leprosy; its demonstration of the rehabilitation of blind workers in agricultural jobs; and its studies of the rehabilitation of the severely burned. Studies of the rehabilitation of the blind are also being supported in Israel and in Brazil outstanding work has been done on the development of training methods for prosthetists and orthotists and in methods of manufacturing simple, inexpensive prosthetic devices.

Under the provisions of the International Health Research Act of 1961, the VRA has made 125 awards for the exchange of experts in rehabilitation between the United States and countries participating in international research projects. The first exchange visit was made by U.S. plastic surgeons who went to Vellore, India. In two months rotation, experts from such schools as Harvard, Yale, Johns Hopkins, Pittsburgh, Kansas, Ohio State, North Carolina and Pennsylvania visited the Christian Medical College and the other facilities in Vellore and brought back to the United States a wealth of information,

not only on the treatment of leprosy itself, but on corollary methods of skin grafting and cosmetic restoration.

Since 1947, the Vocational Rehabilitation Administration has been planning training programs for participants sent from other countries by their governments and supported by study grants by AID, the Department of State, the UN or the UN specialized agencies. There have been more than 1500 persons from 80 countries who have taken part in this program. Many of the trainees are now planning, directing or operating rehabilitation programs in their own countries.

c. Children's Bureau

The Children's Bureau has long played an active and important role in international health programs. The Children's Bureau has worked with the Interamerican Children's Institute since the Institute's formation in 1927. It played a major role in the organization of UNICEF and the Director of the Children's Bureau, or a senior member of the staff, has always served in the Executive Committee of UNICEF. The Children's Bureau thus plays a direct role in UNICEF policy planning and program development.

The Children's Bureau works closely with AID as it has with predecessor agencies through its Division of International Cooperation. The Bureau has assigned personnel to AID for service in AID/Washington or abroad; it has cooperated in the development of special programs for AID financed participants (e.g., family planning, nurse-midwifery); it has helped the programming of selected AID and UN fellows and other participants in child health and related fields; and it has supported research overseas under Section 104k of Public Law 480.

The advisory services provided by the Children's Bureau include the following fields: pediatrics, nursing, midwifery, maternal and child health, social welfare, and nutrition. In view of present rates of population growth in most developing countries, the increasing number of children, the growing problem of preschool child malnutrition and the growing interest in the problems by AID and the UN and the UN specialized agencies. It is clear that the international role of the Children's Bureau will be even more significant in the future than it has been in the past.

4. Department of Agriculture

The Department of Agriculture supports many programs that are important directly or indirectly in improving the health of the people in the developing countries, but none is more important than the Food for Peace Program administered under Public Law 480. The law has four major sections:

Title I - (the largest P.L. 480 program) - Provides for the sale of United States agricultural commodities to friendly countries with payments to be received in the local currency of the recipient country. The currencies generated may be loaned or granted to the country for development programs and a certain percentage is set aside for such United States uses as the research projects supported by the Department of HEW.

Title II - Authorizes grants of Commodity Credit Corporation stocks of farm products for famine relief. The Agency for International Development is responsible for administering this program and during the calendar year 1963 more than 1.1 million tons of commodities with an estimated Commodity Credit Corporation cost, including ocean freight, of \$227.5 million were approved for shipment to 37 countries.

Title III- Authorizes grants of Commodity Credit Corporation stocks of

farm products through domestic voluntary agencies operating foreign donation programs and for barter of equal value in strategic and other materials. The program authorizes donations of surplus foods to accredited non-profit relief agencies in the United States (e.g., CARE, Catholic Relief Service, Church World Service) and such intergovernmental agencies as UNICEF and FAO, in the amount of \$379 million in fiscal year 1964. Ocean freight subsidies for this program were \$59.3 million. Food distributed through this program reached over 70 million people in 113 countries.

Title IV - Provides for long term sales of agricultural commodities on a long term dollar credit basis.

The major programs supported under Public Law 480 since its inception 10 years ago are: disaster relief, economic development, child feeding, and refugee relief. The approximate dollar value of the foods donated for these programs is \$789 million for disaster relief, \$235 million for economic development, \$147 million for child feeding, \$124 million for refugee relief and \$49 million for other programs.

Although the programs under Title II and Title III of Public Law 480 are not public health or nutrition programs these aspects have been receiving increasing attention in recent years, particularly with respect to child feeding programs (see Section II - Historical Review).

In addition to the Food for Peace Program, the Department of Agriculture supports a research program of great potential value. The budget during fiscal year 1964 was \$25 million. Most of the research activities have as their ultimate purpose the achievement of improved nutrition for Americans, but much of the work has world-wide relevance. The Agricultural Research Service, for example, conducts research on transmission of animal diseases to man;

vector control; pesticide residues; the control of fertility in cattle by means of intrauterine devices; and human nutrition. The Economic Research Service has conducted many important studies. One of their recent studies, published under the title "Man, Land and Food," was an excellent analysis of present and future world food needs, resources and population growth. The Foreign Agricultural Service provides technical personnel to AID and inter-governmental agencies. Although these are not direct health programs there are few that have more significance for health than the programs to increase food production.

5. Department of the Interior

The Department of Interior budgeted about \$1.9 million in fiscal year 1964 for medical and public health services in the Trust Territory of the Pacific Islands. In addition, the Department will disburse about \$1 million for research on water, occupational health of miners, and the nutritional value of fishery products. Particularly important with respect to fishery products is the work of the Bureau of Commercial Fisheries on Fish Protein Concentrate.

6. Department of Commerce

The Department of Commerce has made indirect contributions to public health programs in the developing countries by the assignment of personnel for census or statistical projects in the foreign assistance program. In addition, the National Bureau of Standards and the Office of Technical Reports play an indirect role in terms of research and information exchange.

7. Department of Labor

The Labor Department makes an indirect contribution to international

health through its work with the International Labor Organization which is concerned with costs of medical care, health services for workers and manpower planning. Other functions of the Department of Labor in the field of occupational safety and hygiene are closely related to international health. These functions are carried out in cooperation with AID and other international agencies and include training of foreign visitors in occupational safety and hygiene, provision of technical information and consultant services.

8. Atomic Energy Commission

The medical and health activities of the Atomic Energy Commission (AEC) that have potential relevance in the developing countries arise mainly in the research programs. Research in the preservation of foods by radiation, the use of atomic energy as a source of energy for desalination plants and the medical application of radio-isotopes and radiation are of potential importance. The Atomic Energy Commission also works with the International Atomic Energy Agency, the Advisory Committee on the Peaceful Uses of Atomic Energy and the Scientific Committee on the Effects of Atomic Radiation of the UN.

9. National Science Foundation

The research support provided by the National Science Foundation (NSF) is not specifically international, but because of the basic nature of the research supported it has some world-wide relevance for investigators. Approximately \$31 million of the budget in fiscal year 1964 was devoted to support of medical and health-related fields such as molecular biology, genetics, immunochemistry and metabolic biology.

10. Veterans Administration

The programs of the Veterans Administration in international health are three. First, is the training of residents in clinical medicine. Since the VA has made foreign medical school graduates eligible for residency training in its hospitals over 400 have been appointed. A program is now being organized in collaboration with AID and three American universities whereby carefully selected candidates will be given a year of education in basic sciences, English, mathematics and other subjects if required prior to a residency training program in one of a few selected VA hospitals affiliated with medical schools. This is being designed to educate physicians to be teachers and investigators in their own countries. Second, is the presence of many foreign scientists working with VA investigators in various of the VA medical research programs. Furthermore, the medical research program in parasitology and tropical medicine at the VA medical center in San Juan, Puerto Rico, has direct relevance to the health problems of developing countries. Third, is the payment by the VA of about \$500,000 per year to the Veterans Hospital in the Philippines for medical service rendered to beneficiaries.

11. Smithsonian Institution

The science information exchange program which the Smithsonian Institution operates on behalf of several agencies of the Federal Government provides a clearinghouse of information about current research projects in medicine, biology, psychology and other life sciences. This program helps to prevent duplication of effort in research related to international health problems and it makes information available in such projects.

TABLE 9

PRIVATE RESOURCES AND INTERNATIONAL HEALTH PROGRAMS

1. Private Business and Industry

- (a) Pharmaceutical industry
- (b) Chemical industry
- (c) Engineering and construction
- (d) Medical equipment and supplies
- (e) Industries operating in developing countries (mining, oil, manufacturing)

2. Private Foundations

- | | |
|----------------------------|---------------------------|
| (a) Rockefeller Foundation | (e) Milbank Memorial Fund |
| (b) Ford Foundation | (f) China Medical Board |
| (c) Population Council | (g) Commonwealth Fund |
| (d) Kellogg Foundation | (h) Others |

3. Professional Organizations

- (a) Medical
- (b) Other health professions
- (c) Other scientific

4. Voluntary Organizations

- (a) Church related (medical missionaries)
- (b) Voluntary health and welfare agencies
- (c) Non-sectarian aid organizations

5. Universities

6. Hospitals

7. Other Organizations and Institutions

The professional organizations have long played an important role in the exchange of scientific and technical information. Many professional organizations in the United States are taking on an increasingly important international character (e.g., College of Chest Physicians). These organizations not only contribute to an exchange of information through meetings and journals, they provide a mechanism for special seminars and training programs, particularly at the graduate and the post-graduate levels.

A. Private Business and Industry

The role of private industry as a major force in social and economic development is often not adequately understood in the developing countries or by the general public in the United States. The Agency for International Development has a special Office of Private Enterprise to inform businesses and industries of opportunities in developing countries, to serve as a focal point for information and to coordinate AID activities with respect to private enterprise, to assist the AID in effectively utilizing the vast resources in its overseas programs and to administer specific programs with respect to private enterprise.

The pharmaceutical industry in the United States and in Western Europe have both made significant contributions to the health of people in the developing countries by the development and marketing of the important drugs and vaccines used throughout the world. The development of measles, poliomyelitis and freeze dried smallpox vaccines represent recent Western advances in biologicals. These add to the already available diphtheria, pertussis, typhoid, tetanus, BCG and cholera vaccines. The sulfonamide drugs were first studied in Europe in the mid-1930's, and since that time penicillin and an array of other antibiotics and chemotherapeutic agents have been discovered which have markedly reduced morbidity and mortality from yaws, syphilis, tuberculosis, pneumonia, typhoid, typhus, malaria, bacterial diarrhea and many other diseases common in the developing countries. The discovery and development of vitamins in the past fifty years has had a profound effect on many of the nutritional diseases throughout the world. The analgesic drugs, long in use, have brought immeasurable relief to millions and they are effectively applied in many developing countries. The development

of the progestational steroids used in the regulation of fertility are now widely used for family planning throughout the world.

The chemical industry is closely allied with the pharmaceutical industry and many of today's therapeutic agents were developed from unrelated chemical discoveries. The recent development of the plastic intrauterine device is an example of a development in private industry which made possible a significant medical advance. The plastic intrauterine device is now being used in both South Korea and the Republic of China (Taiwan), and programs including the plastic intrauterine device have been initiated in Turkey, Pakistan and India. Without the plastic there would be no intrauterine device and little likelihood that developing countries would be carrying out effective family planning programs. There are few chemical compounds, if any, that have contributed as much to the relief of human misery as DDT. This is a product of private enterprise.

There are many engineering and construction firms that are not only assisting developing countries in the planning, construction and operation of urban water supply and sewerage systems but they are helping to train the future technicians and managers who will operate these systems.

The manufacturers of medical equipment and supplies have made many advances which are being utilized in the developing countries. The difficulties of equipment maintenance and repair and the lack of trained technical personnel have limited the wider usefulness of much research, diagnostic and therapeutic equipment.

Many of the private businesses and industries operating in the developing countries have made a direct contribution to improving the health of their

employees and in some cases their employees' dependents (e.g., ARAMCO). These organizations have often operated plant safety, medical care and preventive medical programs that have trained personnel and demonstrated the value of modern medicine. In many places the facilities and personnel are being integrated into the developing country's own systems of medical care and public health. In a recent survey, 24 companies reported that they were operating 49 medical programs in 27 countries costing \$27 million and involving over 300 physicians, 33 dentists, 853 nurses and 58 hospitals.

Private enterprises in the United States have invested billions of dollars in the development of plants, factories and business establishments in the developing countries. There are many joint ventures and in many countries an increasing awareness of the potential benefit to be derived in terms of economic and social development by the creation of the necessary conditions in which free enterprise can operate.

B. Foundations

The Rockefeller Foundation has probably contributed more to the improvement of health throughout the world than any similar institution. The Foundation has been operating in less developed areas of the world during the past fifty years. Many of the principles and techniques originally developed in Rockefeller Foundation supported projects have been applied in mass programs of disease control or eradication as well as in the development of educational and research institutions. Many of the leading scientists and important universities, medical schools and research institutions in the developing countries have received significant support from the Foundation.

In recent years the Foundation has been shifting its support from individuals and disease related activities to programs of long range, broad based institutional support.

The Kellogg Foundation has long been active in Latin America, particularly in training and in the upgrading of the institutional capability of hospitals and related health care institutions. The Milbank Memorial Fund, the Ford Foundation, the Rockefeller Foundation and the Population Council have played a leading role in the field of population studies, demography, research in human reproduction and programs of family planning. The Commonwealth Fund has provided support for U.S. medical schools in the developing countries. The China Medical Board has made a long and remarkably effective contribution to medical schools in the Far East through support for faculty exchanges, visiting professorships, libraries, research and teaching facilities and support for outstanding teachers and investigators.

There are an increasing number of private foundations supporting international programs. With the decline in Rockefeller Foundation support for medical education and public health, foundation support in these fields seems to have declined somewhat, but in the pioneering areas such as population studies and family planning the foundations (e.g., Ford, Population Council) are making large investments. The total investment by foundations in international programs now exceeds \$60 million annually. It is estimated that more than \$8 million is provided in support of public health and medical programs.

C. Professional Organizations

The role of professional organizations has long been very significant, but less tangible than private industry and the foundations. There is a growing

bond of kinship between professionals in the biomedical and health sciences throughout the world. This kinship and cooperation not only helps to promote the rapid application of new knowledge for the welfare of mankind but it makes a significant contribution to better understanding among people and is one of the many positive factors in our continuing struggle for world peace. Probably the most significant United States based professional society operating overseas is the Christian Medical Society. This group has more than 500 physician members serving in the developing countries and it maintains contact with hundreds of hospitals and dispensaries overseas. It annually sends more than \$2 million worth of drugs, supplies and equipment to these institutions.

The American Medical Association has been gradually expanding its activities in the international field. It has sponsored several significant conferences on international health; it serves as a focal point for information for American physicians wishing to serve overseas; it provides information to foreign physicians visiting this country; it keeps the American medical profession informed of developments in the international field through its many publications; it strives to improve the training programs for foreign physicians in the United States; it provides assistance to AID, to other United States government agencies and those of developing nations in the recruitment of physicians to serve abroad; it is developing closer working relationships with medical

associations in other countries (e.g., Korea Medical Association); it provides financial support to selected medical students or others interested in nutrition wishing to serve overseas; and it is a strong supporter of the World Medical Association.

The Association of American Medical Colleges (AAMC) created an international division a few years ago under foundation grants and a contract with AID. The Association has done work to stimulate the interest of medical schools in the United States in the needs and opportunities of medical education programs in the developing countries. All the medical schools in the United States now have a liaison officer for international activities. A survey by the Association revealed that over 4,000 fulltime faculty members are interested in overseas service. Of this number, 689 expressed a willingness to serve two years or more. The Association has undertaken a variety of services for AID, the most significant, a year long study of medical education in the developing countries, will be completed in the near future.

The growth of the international activities of the AAMC parallels a similar growth in the development of national and regional associations of medical schools. The larger of the two regional associations is the Pan American Federation of Associations of Medical Schools, which includes the national associations of nine countries and the individual schools of seven other countries. The Federation has a full time staff which works closely with the AAMC, which is the oldest and largest member of the Federation. The second of the regional associations is the Associations of Medical Schools of Africa founded in 1963.

The most important developments of a national associations of medical educators have taken place in India, with the formation of the Indian Association for the Advancement of Medical Education in 1960, and in Colombia. The Indian Association not only holds annual institutes patterned on those of the AAMC but it publishes the only medical journal in the world outside the United States devoted to medical education. Financial support for the Indian Association has come from membership dues and grants from AID and the Rockefeller Foundation. The Colombian association has spearheaded the development of the Pan American Federation of Associations of Medical Schools.

The growth of the national and regional associations of medical schools and medical educators forges a powerful instrument for international cooperation in the improvement of medical education for the welfare of the sick throughout the world. The Association of American Medical Colleges has played a key role in this development. The forthcoming AAMC Institute on International Medical Education in the spring of 1966 and the Third World Congress on Medical Education planned for New Delhi in the fall of 1966 should provide additional opportunities for greater understanding of the problems and opportunities.

The American Hospital Association (AHA) maintains an active international division which has worked particularly effectively in Latin America. The international division of the AHA is supported in part by an AID contract and foundation grants. The American Hospital

Association has provided a variety of professional, technical and administrative services to institutions in developing countries requesting assistance; it has prepared special technical materials appropriate to the needs of hospitals in developing countries; its members have served abroad on long and short term assignments; it has provided services to many foreign visitors and students; it has arranged special programs for visiting hospital personnel; many of its members have participated in international conferences and seminars; and recently it has organized a program to make hospital equipment available to hospitals in Central America.

The World Medical Association has played a particularly significant role in its sponsorship of the annual meeting of the World Medical Association and the joint sponsorship of the two World Congresses on Medical Education. The topic of the Third Congress planned for New Delhi, India, in 1966 is Medical Education for Social and Economic Development.

Another important, but quite different, type of international cooperation is that typified by the United States-Mexico Border Public Health Association. This is a voluntary group whose Board of Trustees is comprised of the Director of the Pan American Health Organization, the Surgeon General of the Public Health Service, the Minister of Health and Welfare of Mexico, and the ten State Health Officers of the six Mexican and four American border states. This Association has taken as its scope all aspects of public health from

garbage disposal to geriatrics and, on the basis of resolutions, has developed a number of quite successful coordinated programs for the improvement of health on the United States-Mexico border. The Association also serves as the vehicle for occasional high-level conferences on specific problems at which documents of agreement are developed and signed by the respective national and state health agencies.

There are many other professional organizations whose activities promote improved cooperation and understanding in international health. The International Council of Scientific Unions (ICSU) includes several scientific unions (biochemistry, biological sciences, physiology) related to medicine and public health. The primary purpose of the organization is to advance scientific progress by encouraging governments to support cooperation in international scientific programs and by coordinating interdisciplinary and world-wide scientific projects. The United States contributes about \$50,000 annually to support the program of the ICSU.

The scientific and technological revolution of this century has increased the need for communication of knowledge among professional groups. There are now over 3,000 medical and related journals of potential interest to physicians, nurses, pharmacists, health educators, sanitary engineers, microbiologists and other medical and public health workers, teachers and investigators. Many of these journals are organs of professional societies that are contributing very significantly to advances in medicine and public health throughout the world.

D. Voluntary Agencies

The role of church related organizations in international health is clear from their support of five major medical schools in the developing countries, of over 300 hospitals and dispensaries and many training schools for mid-wives, nurses and auxiliary medical personnel. These institutions have placed increasing emphasis on training and the development of host country resources in recent years. Many of the church related institutions are playing a very important role in developing hospitals and related medical care institutions in the developing countries, just as church related institutions played a key role in the development of hospitals in Western Europe and the United States.

The voluntary agencies are making an increasingly important contribution in such areas as food distribution, child feeding, disaster relief, disease control and rehabilitation in the developing countries. Registered American voluntary agencies now have 600 American representatives overseas and employ about 5,000 local personnel in the countries where they have programs.

The role of the voluntary agencies in overseas disaster relief was repeatedly demonstrated in 1964. The United States Government and the voluntary agencies provided more than \$20 million in assistance to people in 39 countries who suffered from 62 major disasters in 1964. More than 40 of these disasters involved significant medical or public health components. American voluntary agencies which participated in

the disaster relief programs were American Jewish Joint Distribution Committee, the American National Red Cross, the Cooperative for American Relief Everywhere (CARE), Church World Services, Catholic Relief Services, the Mennonite Central Committee, and the Seventh Day Adventist Welfare Service.

The types of disasters encountered during 1964 were similar to those in which Americans provided some of their first overseas assistance (Section II - Historical Review) over a century ago. The types of disasters: floods (16 in 11 countries), famine (9 in 8 countries), epidemics (6), earthquakes (6), civil strife (5), typhoons and hurricanes (5), fire (4), and explosions (3).

The need for prompt U.S. Government action and close coordination in disaster relief led to the creation of a Special Disaster Relief Coordination Office in AID, with similar offices established in the Departments of Defense, State and HEW. Another factor to be considered in disaster relief is the contributions by other countries. In 1964 there were 56 countries and various UN agencies providing relief assistance.

A number of non-sectarian, medically oriented, technical assistance organizations have developed since the Second World War. There are now many of these organizations, large and small, which carry out a variety of programs in the developing countries. Two of the most successful of these organizations have been Project HOPE and MEDICO.

The first overseas program of Project HOPE took a large hospital ship to Southeast Asia where a number of medical care and training programs were carried out. A long term rehabilitation program has been continued in Vietnam. Since then the HOPE ship has been in Peru, Ecuador and Guinea. After the ship leaves, usually after nine months or more, a long term institutionally based program is continued. In Peru, for example, there are 20 professional, technical and administrative personnel working with the medical school faculty in Trujillo.

MEDICO which began as an independent organization now works through the administrative framework of CARE. It has had orthopedic, ophthalmological and other medical care-teaching teams in countries of the Far East, South and Southeast Asia, Middle East, North Africa, East Africa and Central America. These projects range in size from small rural clinics to large city hospitals and they may involve doctors, nurses, equipment and drugs. In 1964 MEDICO ministered to half a million sick and injured people. Although Project HOPE receives AID funds to support the operation and maintenance of the ship, the bulk of the funds and all of the medical supplies, equipment and drugs used by both organizations are donated from private sources. Both MEDICO and HOPE have some salaried overseas staff as well as headquarters personnel, but the majority of the medical personnel working overseas are volunteers working without pay or for salaries far below their U.S. earning capacity.

There are actually 195 non-profit organizations providing some type of technical assistance abroad in such areas as medical care, disaster relief, child feeding and public health. There are 27 of these organizations that receive U.S. Government support. For example, Project HOPE receives about \$1.5 million annually from the U.S. Government to pay for the cost of operating the hospital ship SS HOPE. This pays for the crew and other ship expenses while the medical program is supported entirely by private contributions. The Agency for International Development also provides approximately \$5 million to U.S. voluntary agencies to ship an estimated \$117 million of drugs, medical supplies and other donated relief supplies to institutions in about 80 countries. Under Title II of Public Law 480 (Food for Peace) approximately \$330 million of surplus agricultural products provided by the Commodity Credit Corporation were distributed by voluntary agencies in 113 countries and territories to over 71 million people.

E. Universities

The role of the universities in world affairs, particularly in relation to the foreign aid program of the United States, has received increasingly thoughtful attention in recent years. During the past three years a series of steps have been taken by AID to develop a more effective working relationship with the universities. As a result of this effort an increasing emphasis on the role of the universities in international development has occurred. The number of U.S. universities

in AID supported programs has increased from 87 to 119 in less than three years. The cost has risen from \$121 to \$230 million during this period. There are 67 universities and colleges involved in AID-financed projects overseas in 41 countries. The present AID investment in the overseas program is \$170 million. The remainder of the universities are involved in participant training or research on special projects based in the U.S. institution which cost \$60 million.

The Agency for International Development and its predecessor agencies have invested many millions of dollars in support of medical education, particularly through university contracts. There have been a total of 11 contracts, seven of which are still active, since 1951. These contracts have involved nine U.S. medical schools and 17 foreign schools. These relationships have varied considerably from the large scale, long-term technical and commodity assistance programs characteristic of the University of California-Indonesia and Indiana-Pakistan Post-graduate Medical Center contracts to the single medical educator involved in the Buffalo-Paraguay contract. The Tulane-Colombia contract provided only for short-term consultants to the seven Colombian medical schools.

Another program financed by AID which has involved the universities has been the participant training (fellowships) program which has brought more than 1550 medical educators to the United States since 1951. Of these, approximately 60 percent were in basic science,

while the remainder were in clinical fields. At the present time long-term and short-term participants are working in over 40 U.S. medical schools. Because the participants' selection is based on the condition that their return to an academic position is assured by the host government, this program has had a very significant influence on medical education in the developing countries.

The magnitude of the educational opportunity and responsibility of U.S. medical schools, schools of public health and their parent universities is clear when one examines the number, origin and type of foreign students in U.S. universities, colleges and other institutions of higher learning. There are now more than 64,000 foreign undergraduate and graduate students in U.S. institutions of higher learning. Of this group about 4,700 are in medicine, pre-medicine, biology, biochemistry, dentistry, nursing, pharmacy, public health or other biomedical fields. There are, in addition, approximately 2,300 hospital interns and 6,500 hospital resident physicians who are graduates of foreign medical schools in training in the United States.

The present graduates of foreign medical schools now training in the U.S. come from 98 different nations with about 70 percent from developing countries. The number of these physicians in training in university hospitals is now more than 2,900 (17 percent of all university hospital interns and residents). In the Schools of Public Health about 25 percent of the students are graduates of foreign universities

or other institutions. A third important group under the direct influence of U.S. universities are the 1,000 biomedical research trainees who are graduates of foreign universities. About 60 percent of these trainees are from the developing countries. The great majority of these trainees return to their own countries and many become medical school faculty members. It has been estimated that about 330 physicians in this category return to developing countries each year and the majority return to part-time teaching positions in medical schools.

The exchange of faculty members between universities in the U.S. and other nations is relatively small in size, but the exchange adds greatly to the cooperative activities between universities here and abroad. In 1964 there were over 1,500 foreign medical and public health scholars or faculty members in the U.S. on academic assignments. There were probably several hundred U.S. faculty members in institutions abroad, but less than half of these were in developing countries. There are a variety of mechanisms for financing these exchanges including foundations, U.S. Government, foreign governments, universities and other private resources.

The universities make another significant contribution in the services of faculty members made available for consultation and advisory services to the U.S. Government, multilateral agencies (e.g., WHO), foreign governments or institutions, private foundations, voluntary agencies and private industries in the developing countries.

The research activities conducted by university faculty members on problems of importance to the developing countries is supported by university funds, NIH grants, foundation grants, by AID grants and grants from the Armed Forces, the Department of Defense and the Vocational Rehabilitation Administration. There are many projects that are carried out jointly or cooperatively by scientists in the developing countries and the United States. To date, however, emphasis has been on tropical diseases rather than on the complex interrelationships of health and development. A series of studies have been initiated in the last several years as a result of AID financing. The Harvard School of Public Health is conducting a study on the relationship of health and education to economic development; the Medical College of Virginia is conducting a study of the Assistant Medical Officer and the Public Health Service is cooperating with the Rockefeller Foundation in a study of health manpower in the developing countries; nutrition research and evaluation projects have been initiated with AID and Defense Department financing through the Nutrition Section, Office of International Research, National Institutes of Health; and two recent AID grants have been made to Johns Hopkins and North Carolina for the development of population research and training units.

A unique American contribution in the international field is the American University of Beirut. This institution, which is chartered in New York State and which is considered a U.S. institution, has grown

in the past one hundred years from a small, Protestant, liberal arts college to a regional center of learning. The Medical School, the School of Public Health, the School of Nursing and the School of Pharmacy have all contributed teachers as well as practitioners to meet the needs of the Middle East. At the present time the university is creating a modern teaching medical center with the development of new research and teaching facilities as well as a new hospital. This program has been supported by grants from AID of more than \$16 million in recent years. When completed this will be a truly modern hospital center capable of providing service to the whole of the Middle East.

F. Hospitals

The hospitals of the United States have a very significant role in foreign aid because of their internship and residency programs for graduates of foreign medical schools. At the present time approximately one-third of all interns and residents in the hospitals in the United States are graduates of foreign medical schools. These graduates come from almost everywhere in the world for this training. On a percentage basis in 1962-1963 they came from the following areas: Far East - 38 percent; Latin America - 19 percent; Near and Middle East - 17 percent; Europe - 15 percent; North America - 8 percent; Africa - 2 percent; and other areas - 1 percent. At the present time there are approximately 8,800 foreign interns and residents in training in hospitals in the United States. Approximately two-thirds of these physicians are

in training in hospitals without a medical school affiliation. Although most of the interns and residents express satisfaction with the training they receive, it is clear that the programs are not oriented to the health problems in the developing countries. There is increasing interest in developing programs that would be more relevant, that would put more stress on infectious disease, nutrition and preventive medicine than do most U.S. training programs. The potential contribution of both university and non-affiliated community hospitals have not been fully developed nor have many institution-to-institution relationships been developed between hospitals in the United States and in the developing countries.

G. Other

(a) National Academy of Sciences - National Research Council

The National Academy of Sciences - National Research Council is a quasi official, non-governmental organization that plays varied roles, direct and indirect, in the furtherance of international cooperation and communication in many fields of science and technology, including those related to health. It provides the usual point of contact with its equivalent scientific bodies, as for example in the agreement with the Soviet Academy of Science for the exchange visits of scientists. On behalf of United States scientists it adheres to the Council for International Organizations of Medical Sciences, the International Union of Physiological Sciences and similar bodies. It

facilitates the participation of American scientists in international congresses and it sponsors conferences on a wide range of subjects. In addition to the national committees for specific international unions, it maintains the Advisory Committee on International Organizations and Programs, Advisory Committees on Africa, USSR and Eastern Europe, and Tropical Medicine as well as the Latin American and Pacific Science Boards. The Food and Nutrition Board has made particularly significant contributions in recent years because of the close working relationship between its members and staff members in AID, the ICNND Secretariat and the Office of the Special Assistant to the President for Food for Peace.

One major exception to the catalytic and advisory nature of its function is the operation of the Atomic Bomb Casualty Commission, under contract with the Atomic Energy Commission and in partnership with the Japanese National Institute of Health. The Commission has been engaged since 1948 in studying the late effects of atomic radiation in the survivors in Hiroshima and Nagasaki. The United States contribution is approximately \$3 million annually.

(b) Gorgas Memorial Laboratory

The Gorgas Memorial Laboratory was established by joint action of the United States and Panamanian Governments in the Republic of Panama in 1929, to serve as the research arm of the Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc. The Board

of Directors of the Institute includes private citizens and the Surgeons General of the Army, Navy, Air Force and Public Health Service of the United States. The Laboratory has cooperative arrangements with the Pan American Health Organization; World Health Organization, U.S. Army, Navy, and Public Health Service research units and the Peace Corps; agencies of the Panamanian Government, and other governmental and private health agencies. The United States contributed a new half-million dollar research center, which enabled addition of research in bacteriology serology, and experimental pathology. Laboratory studies during Fiscal Year 1964 included research on arborviruses, leishmaniasis, trypanosomes, malaria, intestinal parasites of man and other parasitic animal studies, diarrheal diseases, typhoid, and toxoplasmosis in Latin American nationals and susceptible U.S. Peace Corps volunteers. Work continues on the study of arthropods, mosquitoes, animals concerned in the ecology of human diseases, and Drosophila genetics. During FY 1964, 16 research scientists had various projects, with supporting personnel of over 90 persons. The Laboratory has continued training programs, and during FY 1964 there were 51 visitors from 7 countries. New pathogenic agents are found among the viruses and protozoa, new localities for disease agents disclosed, advancements made in diagnosis and treatment, and new information contributed to epidemiological knowledge. Financial contributions to the Institute for 1964 were: (1) contributions by the United States Government - \$350,000; (2) research grants from the Public Health Service - \$152,000; (3) contribution from the Colonial Research Institute - \$100,000; (4) other - \$13,000.

V. SUMMARY AND CONCLUSIONS

The past and present efforts of the many nations, international organizations, private institutions and individuals who have contributed to the improvement in the health of the world's people constitute one of the most dramatic and successful examples of international cooperation.

The present American effort involves four major departments of the Executive Branch of the U.S. Government, namely the Department of State, Department of Defense, Department of Agriculture and Department of Health, Education and Welfare. There is major U.S. support for such intergovernmental agencies as the World Health Organization, Pan American Sanitary Bureau, United Nations Children's Fund which are engaged primarily in health work. In addition, the intergovernmental lending agencies such as the International Bank for Reconstruction and Development, the International Development Association and the Inter-American Development Bank, receive major financial support from the United States and they, in turn, are major sources of financial assistance for such important health projects as the construction of community water supplies.

The United States is currently making available several hundred million dollars, thousands of technicians and millions of tons of food to help improve the health of the world's people. In spite of this massive effort, and an ever greater effort by many other nations,

progress is inadequate in the face of the unprecedented growth in the world's population, the slow pace of economic growth in the developing nations and the declining per capita food supply in many parts of the world.

The United States is committed to these large scale efforts for a variety of reasons. One of the major factors is the feeling that Americans do these things because they believe health is an important, indeed vital, aspiration of people throughout the world. They do it also for a humanitarian reason, to relieve human suffering. These feelings have very deep roots in our society. It is clear that, as a people, we believe that we should be able to apply at least some of our wealth and advanced medical technology to these objectives. The United States also supports health programs because of their contribution to the economic and social development programs in the less developed countries. The late President Kennedy expressed this very well when he said:

"To those people in the huts and villages of half the globe, struggling to break the bonds of mass misery, we pledge our best efforts to help them help themselves, for whatever period - not because the Communists may be doing it, not because we seek their votes, but because it is morally right."

This commitment has been reaffirmed in both general and specific terms by President Johnson. He has said:

"No President who looks beyond the immediate problems which crowd his desk can fail to extend the hand and heart of this country to those who are struggling elsewhere."

Unless minimum standards of health are achieved in the developing nations, our own well-being, even our survival, is in jeopardy. Our security is not something that we can provide entirely from within ourselves. Poverty, rising rates of population growth, widespread malnutrition and poor health are linked in their roles as threats to our security.

The promotion of health is a distinctive activity, with its own methodology, history, and philosophy, but it is an activity that is closely allied to others. Health objectives can be well-defined, and they are such as to require coordinated and associated programs in many other areas. Our goals should be to make this coordination of health with other sectors more feasible and more effective.

Although we have looked at the state of the world's health largely in terms of the health professional's traditional preoccupations with disease and its control, it is important to stress that health is inextricably bound with such other factors as poverty, population, and nutrition.

Basic to the improvement of world health are the steps that must be taken to effect an overall rise in standards of living throughout the world. The increasing gap between the rich and the poor, the haves and the have-nots, must be halted, and narrowed.

This implies a commitment to programs of economic and social development, including health, family planning, and the provision of adequate food supplies.

A substantial expansion of United States Government efforts could hasten progress in each of these areas, particularly if maximum encouragement is given to private institutions and international organizations, including the United Nations and the U.N. Specialized Agencies. Enlarged U.S. Government support is particularly needed for research and training in all relevant aspects of population problems, international health, malnutrition and food production, as well as to the general problems related to social and economic development.

The vast health resources of this country must be effectively mobilized and motivated to contribute to the solution of these most pressing world problems. In the words of John Donne in his 17. Meditation:

No man is an Iland, intire of it selfe;
every man is a peece of the Continent,
a part of the maine; if a Clod bee
washed away by the Sea, Europe is the
lesse, as well as if a Promontorie were,
as well as if a Mannor of thy friends
or of thine owne were; Any mans
death diminishes me, because I am
involved in Mankinde