



PH-31

PH-ART 501

72394

INTERNATIONAL HEALTH PROGRAMS  
THE ROLE OF THE UNITED STATES GOVERNMENT

Philip R. Lee, M.D.  
Director, Health Services  
Office of Technical Cooperation and Research  
Agency for International Development

Presented in summary form: School of Public Health  
University of California at Los Angeles  
October 13, 1964

International Health Program; the Role of the...  
614 Agency for International Development. *NTIS*  
A265d International Health Programs; the Role of  
the United States Government. Philip R. Lee.  
Oct. 1964.  
55 p.

1. Public health. 2. Medical care. 3. Health education.  
I. Title. II. Lee, Philip R.

International Health Programs  
The Role of the United States Government

Index

	<u>Page</u>
Introduction . . . . .	1
Governments and Intergovernmental Organizations . . . . .	1
Inter-American and Other Regional Organizations . . . . .	10
Agencies and Institutions Financing Foreign Aid . . . . .	13
United States Government Departments, Institutions and Agencies Involved in International Health Programs . . . . .	18
The Agency for International Development . . . . .	33
Non-governmental Organizations Active in International Health	44
Summary . . . . .	54

Tables

One: Governments Active in International Health Programs . . .	2
Two: The Flow of Long Term Financial Resources from D.A.C. Countries to Less Developed Countries and Multilateral Agencies 1963 (Disbursements) . . . . .	3
Three: Intergovernmental Organizations Involved in Interna- tional Health Programs . . . . .	5
Four: Inter-American and Other Regional Organizations Involved in International Health Programs . . . . .	11
Five: Agencies that Help to Finance Foreign Aid and Trade . .	14
Six: International Health Activities of U.S. Government Agencies	19
Seven: Summary of Health and Sanitation Projects Programmed for A.I.D. Support in Fiscal Year 1965 . . . . .	41
Eight: Funding Estimates for A.I.D.-Supported Health and Sani- tation Projects in Fiscal Year 1965 . . . . .	43

Tables (cont'd)

	<u>Page</u>
Nine: Non-Governmental Organizations Active in International Health . . . . .	45
Ten: Summary of Changes in A.I.D.-University Contracts . . .	51

Charts

I - The United Nations and Its Agencies . . . . .	6
II - Research Grants Awarded by NIH and BSS to Foreign Institutions and International Organizations by Fiscal Year. .	25
III - Percentage Distribution of Foreign Research Grant Funds by Geographic Region, FY 1964 . . . . .	26

## INTERNATIONAL HEALTH

### Introduction

A remarkable number of agencies, organizations, institutions and individuals in the United States are involved, directly or indirectly, in international programs of technical or financial assistance to the economically underdeveloped countries. International programs in public health, medical care, training, rehabilitation and research have been carried out for many years by public and private organizations in the United States. The purpose of this paper is describe briefly the spectrum of agencies, organizations, and institutions involved in such programs and to provide some indication of the present financial commitment of the United States, through both the public and private sectors, to these international health programs.

### Governments and Intergovernmental Organizations

There are at least 20 economically developed or developing nations that provide significant technical or financial assistance to the economically underdeveloped, newly emerging nations (Table One). The countries of Western Europe, Canada, the United States and Japan are members of the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) and in 1963 they disbursed a total of more than \$8.1 billion of financial assistance to less developed countries. This financial assistance was in the form of loans and grants through bilateral public and private sources and through multilateral agencies (Table Two). There is no breakdown available, on a worldwide basis, of the amount of assistance provided in support of programs of health and sanitation in the developing countries.

TABLE ONE

GOVERNMENTS ACTIVE IN INTERNATIONAL HEALTH PROGRAMS

- |                                |                                   |
|--------------------------------|-----------------------------------|
| 1. United States               | 13. Switzerland                   |
| 2. France                      | 14. Denmark                       |
| 3. Great Britain               | 15. Norway                        |
| 4. Federal Republic of Germany | 16. Finland                       |
| 5. Canada                      | 17. Austria                       |
| 6. Italy                       | 18. Spain                         |
| 7. Sweden                      | 19. Israel                        |
| 8. Belgium                     | 20. Japan                         |
| 9. Netherlands                 | 21. Republic of China (Taiwan)    |
| 10. Portugal                   | 22. Philippines                   |
| 11. Australia                  | 23. USSR and other Bloc Countries |
| 12. New Zealand                | 24. Other Countries               |

TABLE TWO

THE FLOW OF LONG TERM FINANCIAL RESOURCES FROM D.A.C. COUNTRIES  
TO LESS DEVELOPED COUNTRIES AND MULTILATERAL AGENCIES  
1963 (DISBURSEMENTS)

(Millions of U.S. Dollars)

<u>Country</u>	<u>Total Public and Private</u>	<u>Total Bilateral</u>	<u>Total Multi- lateral</u>	<u>Direct Private Investment</u>	<u>Guaranteed Export Credits 5 years &amp; over</u>
United States	4,726	3,627	217	878	4
France	1,087.9	830.9	27	208.4	21.3
United Kingdom	724.1	369.5	43.4	286.3	29.9
Germany (Fed. Republic)	557.1	396.2	24.8	107.4	28.7
Italy	270.9	62.6	0.4	129.8	78.1
Japan	264.7	159.3	12.2	79.9	13.3
Belgium	171.2	74.5	15.5	51.8	29.2
Netherlands	145.1	17.8	19.9	98.3	9.1
Canada	103.7	90.2	8.9	4.6	-
Portugal	-	47.0	0.1	-	-
Norway	24.4	2.4	18.3	3.7	-
Denmark	<u>13.9</u>	<u>1.1</u>	<u>9.1</u>	<u>3.0</u>	<u>0.7</u>
TOTAL D.A.C. COUNTRIES	8,145.5	5,678.7	396.2	1,846.7	223.9

The U.S. disbursement to multilateral agencies in 1963 to support programs in the less developed countries was \$217 million. The total U.S. contribution to multilateral organizations and programs was \$240.8 million. The contributions were made to 54 different organizations and 21 special programs.

Two kinds of contributions are provided by the United States to multilateral organizations: (1) "assessed" contributions, which go to finance the regular expenses of those organizations 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 assistance, scientific cooperation, refugee relief and other purposes.

The two major international organizations concerned primarily with health problems in the economically underdeveloped countries are the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF). The WHO is one of the specialized agencies affiliated with the United Nations (UN) while UNICEF is part of the UN with a semiautonomous status (Table Three and Chart One). The organizations with limited health programs are all directly or indirectly affiliated with the United Nations except the International Council of Scientific Unions (Table Three).

The United Nations represents a family of organizations and although the specialized agencies are provided for in the United Nations Charter, they are not subordinate branches of the United Nations. The specialized agencies are independent organizations, each governed by its own central assembly, conference or council and each responsible for raising its

TABLE THREE  
INTERGOVERNMENTAL ORGANIZATIONS  
INVOLVED IN INTERNATIONAL HEALTH PROGRAMS

A. Active Primarily in Health

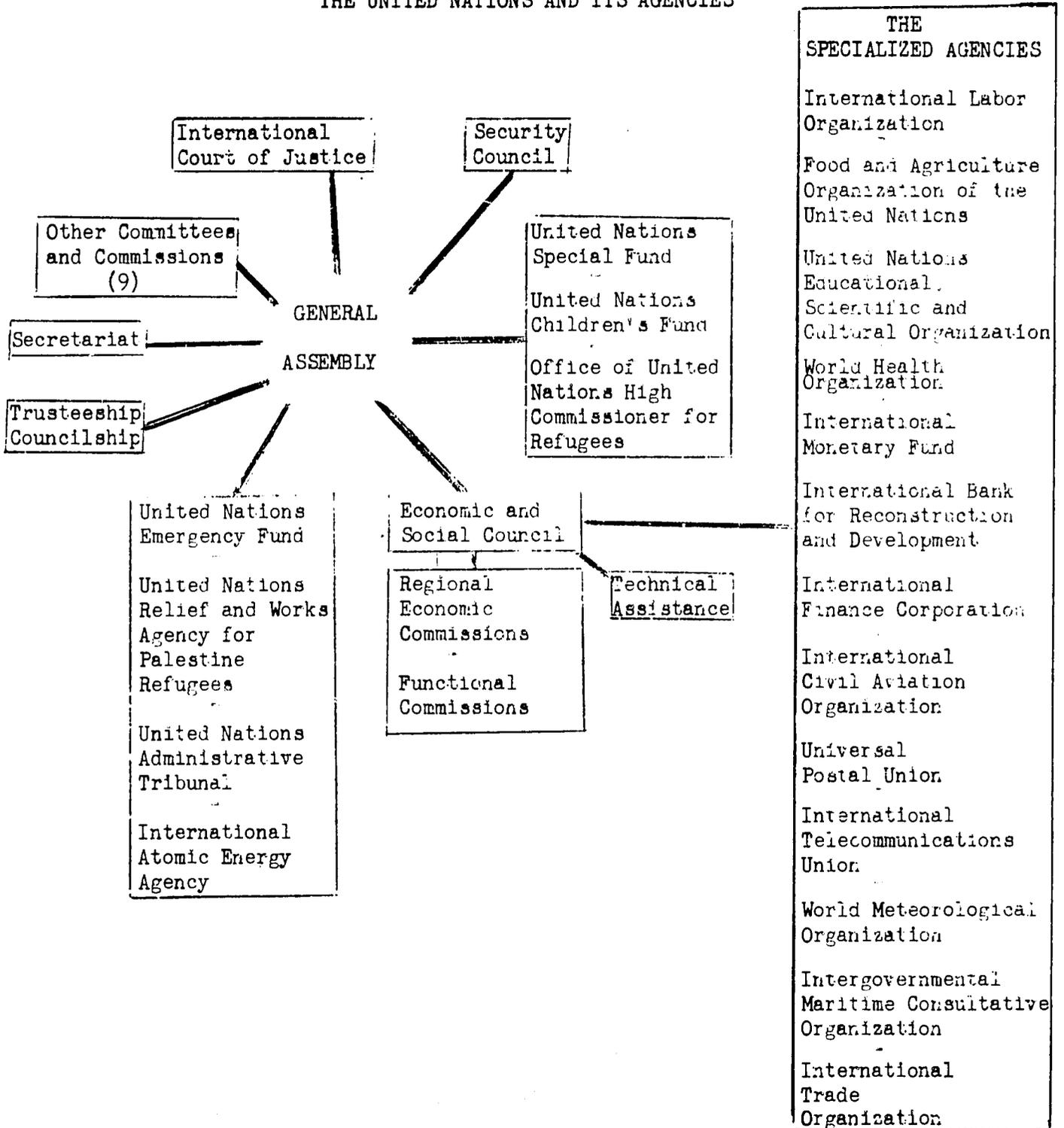
1. World Health Organization (WHO)
2. United Nations Children's Fund (UNICEF)

B. Those with Limited Health Programs

1. Food and Agriculture Organization (FAO)
2. International Labor Organization (ILO)
3. United Nations Educational, Scientific and Cultural  
Organization (UNESCO)
4. United Nations Relief and Works Agency for Palestine Refugees  
in the Near East (UNRWA)
5. United Nations Special Fund and Expanded Program of Technical  
Assistance (ETAP)
6. United Nations Economic Assistance to the Congo
7. International Atomic Energy Agency (IAEA)
8. International Council of Scientific Unions

CHART I

THE UNITED NATIONS AND ITS AGENCIES



own funds. The specialized agencies have entered into agreements with the United Nations to facilitate cooperation and collaboration on matters of common interest. The United States contributes financial support to programs of WHO through a regularly assessed contribution, through voluntary contributions to special programs such as malaria eradication (Pan American Health Organization) and research, through its contributions to the United Nations Expanded Program of Technical Assistance (EPTA) and the United Nations Economic Assistance to the Congo.

The United Nations Children's Fund (UNICEF) has a semiautonomous status within the United Nations. The Executive Director of UNICEF is appointed by the Secretary General of the United Nations in consultation with the Executive Board of UNICEF. About 80 percent of UNICEF's current 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. The technical assistance in public health and nutrition in support of UNICEF projects is provided by WHO and FAO.

The total budget of WHO-supervised or joint WHO/UNICEF projects now exceeds \$90 million annually. This includes the projects of the Pan American Health Organization (PAHO), which is the regional office of WHO for the Americas. These programs are now being carried out in more than 100 countries and they involve almost 5,000 professional, technical and administrative personnel. The total United States contribution to these intergovernmental (or regional) organizations, active primarily in international health programs is about \$40 million annually.

Eight intergovernmental organizations have limited international health programs. The Food and Agriculture Organization (FAO) supports many programs with a direct or indirect effect on human nutrition. The FAO works closely with UNICEF on nutrition programs for children and it also works closely with the Interdepartmental Committee on Nutrition for National Defense (ICNND) in nutrition surveys, food composition tables and related projects. The FAO has a special World Food Program which will receive \$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 the Agency for International Development (A.I.D.) over a three-year period. The program will disburse about \$90 million in food supplies to needy people in the developing countries during its projected three-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.

The International Labor Organization supports studies related to medical care, the health problems of workers and social security. The United Nations Educational, Scientific and Cultural Organization (UNESCO) helps to stimulate new curricula and the use of new educational media and methods in a variety of fields related directly and indirectly to medicine and public health. It also supports seminars and conferences, faculty exchanges, and other activities to improve communication in a variety of scientific fields.

The United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNWRA) has programs in nutrition, environmental sanitation and medical services that employ more than 3,400 professional, technical and administrative personnel and cost more than \$5.5 million annually.

The Expanded Program of Technical Assistance of the United Nations makes about \$7 million available annually to augment the health programs supported by WHO.

The United Nations Economic Assistance to the Congo includes technical assistance and financial aid including programs in public health and medical care. In 1963 the United States contributed \$39.4 million through the UN consisting of \$3 million for technical assistance, \$35 million for commodity import stabilization and \$1.4 million for air transport assistance.

The basic objective of the International Atomic Energy Agency (IAEA) is "to seek to accelerate and enlarge the contribution of atomic energy to promote health and prosperity throughout the world." The United States contributes to the IAEA through regular budget assessments (estimated \$2,238,000 in Fiscal Year 1965) and voluntary contributions, including cash, the provision of fellowships and the services of experts (estimated \$1,100,000 in Fiscal Year 1965). The expanding use of radioisotopes in medical research and therapy and the use of atomic energy as a source of power (e.g., to convert sea water to fresh water) are of immediate and potential value in medical and public health programs.

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 worldwide scientific projects. The United States contributes about \$50,000 annually to support the program of the ICSU.

Inter-American and Other Regional Organizations

The United States contributes to nine inter-American or other regional organizations involved in international health programs (Table Four). The only one of these organizations active primarily in international health programs is the Pan American Health Organization. The organization not only serves as an inter-American organization, but it is the regional office of WHO for the Americas. The regular budget in Fiscal Year 1965 will be \$6,396,000, of which the United States will contribute \$4,264,000 (66 percent). In addition, the United States will voluntarily contribute \$2,000,000 to the Special Fund for Malaria Eradication and to the Community Water Supply Fund.

The Organization of American States (OAS) was formally organized after World War II with the Pan American Union serving as Secretariat. One of the major purposes of the OAS is to promote, by cooperative action of the member states, their economic, social and cultural development. The OAS initiated a program of technical cooperation in 1956 which was to assist economic development in Latin America. The program emphasizes technical education in regional centers. The authority over the program is the Inter-American Economic and Social Council. The United States contributes about \$2 - \$2.5 million annually to this program. The training programs include medical and health personnel, although primary emphasis is not on health programs.

The Inter-American Children's Institute was organized in 1927 as a center for social action, documentation, study, advice and information on all problems relative to childlife and welfare. The U.S. assessment amounts to about \$30,000 annually.

TABLE FOUR  
INTER-AMERICAN AND OTHER REGIONAL ORGANIZATIONS  
INVOLVED IN INTERNATIONAL HEALTH PROGRAMS

A. Active Primarily in Health

1. Pan American Health Organization (PAHO)

B. With Limited Health Programs

1. Organization of American States (OAS)
2. Inter-American Children's Institute
3. North Atlantic Treaty Organization (NATO)
4. Central Treaty Organization (CENTO)
5. Colombo Plan
6. Organization for Economic Cooperation and Development (OECD)
7. Southeast Asia Treaty Organization (SEATO)
8. South Pacific Commission

The science activities of the North Atlantic Treaty Organization (NATO) include a U.S. share of \$1,246,945 in 1963 and this is about the present level of support for the program. Member nations include Belgium, Canada, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States.

The purpose of the Central Treaty Organization (CENTO) is primarily mutual security. Within this broad scope member states agreed to develop the necessary military and counter-subversive measures and to improve the socioeconomic 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. In addition to its regular contribution (\$ 71,293 in 1963), the U.S. makes a small voluntary contribution to the CENTO Multilateral Technical Cooperation Fund from Fiscal Year 1963 A.I.D. appropriations.

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, the collection of information on technical assistance programs undertaken by its members on a bilateral basis and the dissemination of information. The U.S. contribution to the organization was \$4,749 in Fiscal Year 1963. Colombo Plan membership includes: Australia, Bhutan, Burma, Cambodia, Canada, Ceylon, India, Indonesia, Japan, Korea, Laos, Malaysia, Nepal, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom, the United States and Vietnam.

The Organization for Economic Cooperation and Development, particularly the Development Assistance Committee, works for the expansion and improvement of financial and technical assistance to economically underdeveloped countries. The OECD does not carry out any program, but many of its member countries carry out large-scale technical and financial assistance in health and sanitation projects (Table Two).

The South East Asia Treaty Organization (SEATO) maintains a cholera research laboratory in Dacca, Pakistan, and a clinical research laboratory in Bangkok, Thailand. The United States provides personnel and financial support for both of these institutions. The annual U.S. contribution to these institutions through A.I.D. and N.I.H. is \$250,000.

The purpose of the South Pacific Commission is to promote the economic and social advancement of the people in the dependent territories administered by Australia, France, New Zealand, the United Kingdom and the United States. The total U.S. financial contribution to the South Pacific Commission in 1963 was less than \$84,000. The health programs carried out in the Trust Territories are administered by the Department of the Interior and are budgeted for by that Department.

#### Agencies and Institutions Financing Foreign Aid

Three major United States Government agencies or institutions and five international agencies are involved in the financing of foreign assistance and foreign trade (Table Five). 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.

TABLE FIVE

AGENCIES THAT HELP TO FINANCE FOREIGN AID AND TRADE

United States Agencies

1. Export-Import Bank
2. Agency for International Development (Department of State)
  - a. Dollar Loans and Grants
  - 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 (World Bank affiliate)
3. International Monetary Fund
4. International Finance Corporation
5. Inter-American Development Bank
  - a. Ordinary capital resources
  - b. Fund for special operations
  - c. Social Progress Trust Fund

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 United States foreign trade. Its loans are in dollars; they must be repayable 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.

The program of the Agency for International Development will be described in detail in another section of this report. The Agency has provided dollar loans or grants for health and sanitation projects in the following amounts in recent years: Fiscal Year 1962 - \$60.4 million; Fiscal Year 1963 - \$88.5 million; Fiscal Year 1964 - final figures not yet available; Fiscal Year 1965 (estimated) - \$72 million.

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 Corporation 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.

The International Bank for Reconstruction and Development (World Bank) is a specialized agency of the United Nations. The World Bank is owned by 101 countries, each subscribing its capital stock in accordance with the country's development and economic resources. The World Bank makes loans to governments, governmental agencies, and private enterprises of member countries. It began operations in 1946 and by the end of December 1963, had made 371 loans totalling more than \$7.6 billion to finance some 900 projects in 70 countries or territories. Approximately a third of its development loans have been for electric power; a third for transport improvement; and a third for agriculture, industry and general development purposes. In 1963/64 the only water supply project was a \$1.87 million loan to the Government of Malta for construction of a distillation plant to convert sea water to fresh water.

The International Development Association (IDA) was established in 1960 as a World Bank affiliate "to promote economic development, increase productivity and thus raise standards of living in the less developed areas of the world." All World Bank members are eligible to join and 90 had done so as of December 31, 1963, subscribing more than \$980 million to its resources. The resources of IDA are entirely separate from the World Bank but it has no separate staff. The IDA extended its first development credit in May 1961, and by December 31, 1963 had extended 47 credits to 20 countries totalling more than \$557 million. These funds were used to finance road construction, harbor dredging, inland ports, irrigation, drainage and flood protection projects, school construction, small private industry, electric power and water supply. In 1963/64 the IDA extended \$50 million credit to

Pakistan for the development of urban water supply and sewage disposal, and \$3.5 million to the Government of Jordan for the water supply of four major urban centers. An earlier IDA credit of \$2 million had been made in 1961 to improve the water system in Amman, the capital of Jordan.

The International Monetary Fund and the International Finance Corporation are not directly involved in the financing of public health or medical projects or programs.

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. The United States provided \$394 million to the Social Progress Trust Fund, \$6 million to the Organization of American States and \$100 million to A.I.D.'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 loans for community water supply and sanitation projects from June 19, 1961 to December 31, 1963 amounted to \$114 million (31 percent of total). The Social Progress Trust Fund has been replenished during the past two years by additional Congressional appropriation (\$131 million in early 1964). It is anticipated that community water supply and sanitation projects will continue to have a high priority in future loans from the Fund.

United States Government Departments, Institutions and  
Agencies involved in International Health Programs

Thirteen major Departments, Agencies or Institutions are involved in international health and sanitation programs (Table Six). 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 to carry out these programs. In Fiscal Year 1965 it is estimated that the amount will exceed \$198 million, exclusive of the Food for Peace Program, the Foreign currencies generated by repayment of loans and sales of U.S. agricultural surpluses under Public Law 480, and the funds made available through the World Bank, the International Development Association and the Inter-American Development Bank (these latter three institutions have averaged close to \$100 million annually in recent years).

The Department of State is responsible for the regular, or assessed, contributions of the United States Government to the specialized agencies affiliated with the United Nations. The voluntary contributions to UNICEF, the UN Special Fund and Expanded Program of Technical Assistance and UNRWA are authorized and appropriated in the Foreign Assistance legislation. U.S.

TABLE SIX

INTERNATIONAL HEALTH ACTIVITIES OF U.S. GOVERNMENT AGENCIES

1. Department of State
  - a. Office of International Organizations
  - b. Office of Cultural Affairs
  - c. Agency for International Development
  
2. Department of Defense
  - a. Military Assistance Program
  - b. Army
  - c. Air Force
  - d. Navy
  
3. Department of Health, Education and Welfare
  - a. Public Health Service
    - 1) Office of International Health
    - 2) National Institutes of Health
    - 3) Bureau of State Services
    - 4) Bureau of Medical Services
    - 5) Division of Foreign Quarantine
    - 6) National Library of Medicine
    - 7) National Center for Health Statistics
  - b. Vocational Rehabilitation Administration
  - c. Welfare Administration
    - 1) Children's Bureau
  
4. Peace Corps
  
5. Department of Agriculture
  - a. Commodity Credit Corporation
  - b. Agricultural Research Service
  - c. Economic Research Service
  - d. Foreign Agricultural Service
  
6. Department of the Interior
  - a. American Samoa and Trust Territories
  - b. Bureau of Commercial Fisheries
  - c. Other research activities

7. Department of Commerce
  - a. Census Bureau
  - b. National Bureau of Standards (radiation research)
  - c. Office of Technical Reports
8. Department of Labor
9. Atomic Energy Commission
  - a. Division of Biology and Medicine
  - b. Division of International Affairs
10. National Science Foundation
11. Veterans Administration
  - a. Grants to Philippines for Medical Care of Veterans
  - b. Training Program
  - c. Research
12. Smithsonian Institution
13. Export-Import Bank

regular and voluntary contributions to the international health programs of these agencies will exceed \$30 million in fiscal year 1965. In fiscal year 1959 the comparable United States contribution was approximately \$25 million. The Agency for International Development (A.I.D.) is the principal United States agency which administers the bulk of bilateral technical and economic assistance programs in health and sanitation in the developing countries. The budget for these activities projected for fiscal year 1965 is \$72 million. The budget for the program in fiscal year 1959 (under the International Cooperation Administration) was approximately \$61 million and in fiscal year 1962 (the first year of A.I.D.) it was \$60.4 million.

The Department of Defense supports international programs in medicine and public health through bilateral military assistance programs which are part of the Foreign Assistance Program authorized by the Foreign Assistance Act and through programs of the Army, Navy and Air Force which are in direct support of their primary mission. The medical care, public health and training activities carried out through the Military Assistance Program are decentralized to the field and are usually an integral part of a civic action, counter-insurgency, training or other multidisciplinary program. As such, it is difficult to determine the exact scope or nature of all the health-related activities or determine the personnel and expenditure of funds involved in all these activities under the Military Assistance Program. The Senate Subcommittee on Government Operations estimated program support by the Defense Department to be \$9.3 million. Current figures are not available but it is likely that public health and medical programs have increased, rather than decreased in the intervening five years.

The primary mission of the medical services of the Army, Navy and Air Force is to protect the health of U.S. military forces who are deployed within the United States or 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 circumequatorial areas. In order to provide adequate protection for the troops the Army has an excellent preventive medical program and it is one of the most important U.S. government agencies supporting and conducting 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 U.S. research centers at Walter Reed Army Institute of Research and it supports extramural 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 Air Force has a smaller program in preventive medicine and in tropical medicine. The Air Force maintains an Epidemiological Flight in Turkey and another in the Philippines which conduct studies on health and sanitation problems in their respective regions. The preventive medicine research activities of the Air Force that are directly relevant to the developing countries cost an estimated \$300,000 in 1960 and it is estimated not to have increased significantly since that time.

The Navy is faced with problems that differ from both the Air Force and the Army in terms of its personnel. In order to develop a better understanding of health problems that are likely to face Naval personnel in the

Far East and in the Mediterranean theater the Navy maintains a Naval Medical Research Unit (NAMRU) in Taipei, Taiwan and another in Cairo, Egypt. There are Special Naval Preventive Medicine Units in Hawaii and in Naples, Italy. The Navy also provides technical assistance in health and sanitation through SeeBee Stat Teams that often include medical personnel. These various activities cost the Navy an estimated \$500,000 per year. In addition local currencies are available in the Republic of China (Taiwan) and in Egypt to support the research programs of the NAMRU in Taipei and Cairo.

In addition to the direct military assistance programs and the preventive medicine and research programs of the Army, Air Force and Navy, the Department of Defense will contribute approximately one million dollars during the coming year to nutrition surveys and related international projects of the Interdepartmental Committee on Nutrition for National Defense (ICNND). The ICNND also receives financial support from the A.I.D. and N.I.H.

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

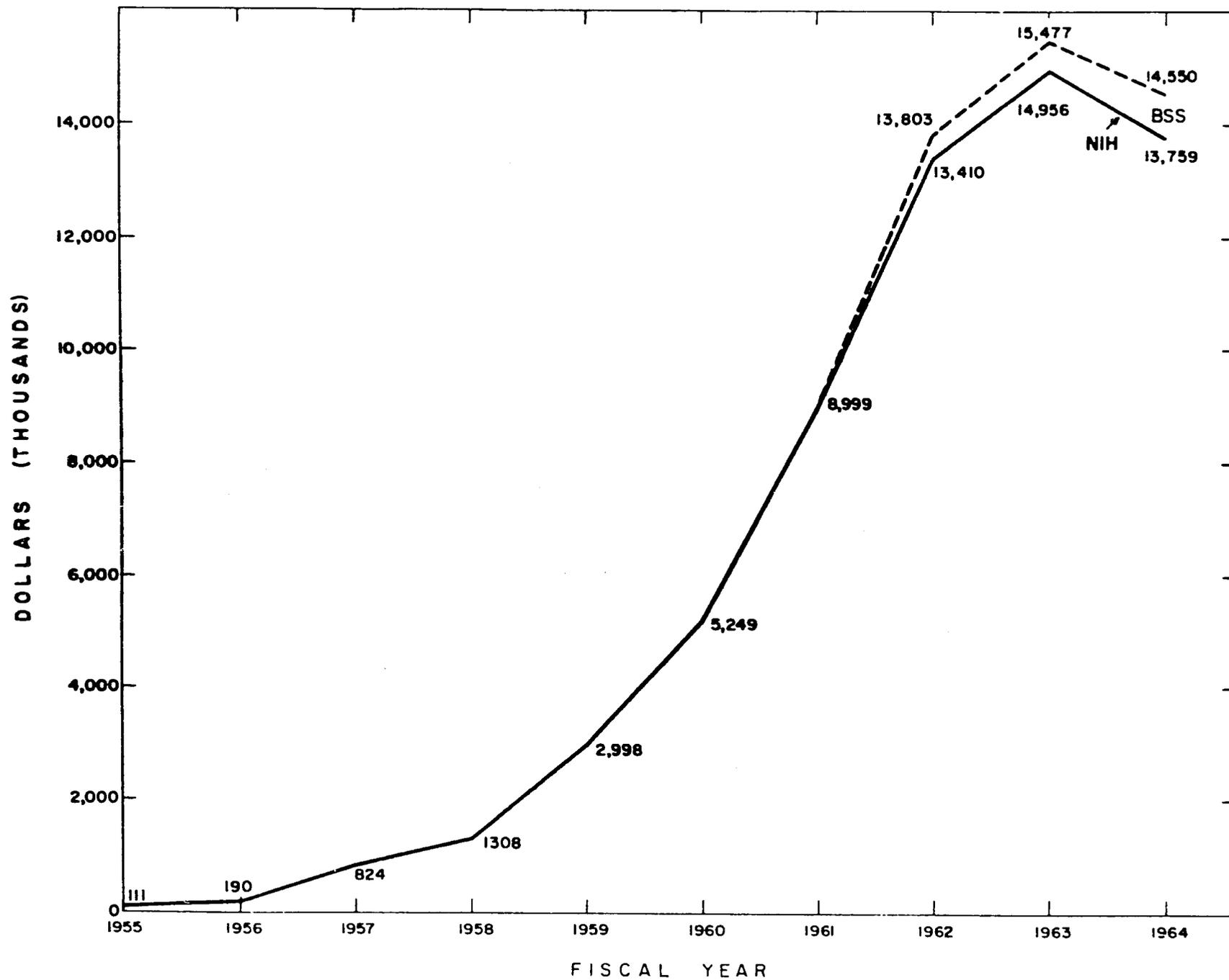
The focal point for the international activities of the Public Health Service is the Office of International Health (O.I.H.) in the Office of the Surgeon General. The Office coordinates the assignment of public health personnel to the Agency for International Development, the World Health Organization (W.H.O.) and the Pan American Health Organization. It serves as the main coordinating office for all technical support services in public health provided A.I.D. by the Public Health Service. The office programs

and provides support for almost all the health participants financed by A.I.D. In addition, the Office provides the staff assistance to the State Department with respect to intergovernmental health agencies and the senior staff of the O.I.H. always serve on the U.S. delegations to the World Health Assembly, W.H.O. Executive Committee and numerous other executive staff meetings of these organizations. There are 110 Public Health Service personnel currently assigned overseas with A.I.D. or in the Office of International Health to provide direct technical support services to A.I.D. There are an additional 36 officers in process of assignment overseas with A.I.D. More than 70 P.H.S. medical officers are assigned to the Peace Corps to provide medical service for the volunteers. Additional P.H.S. personnel are assigned to W.H.O. and the PASB.

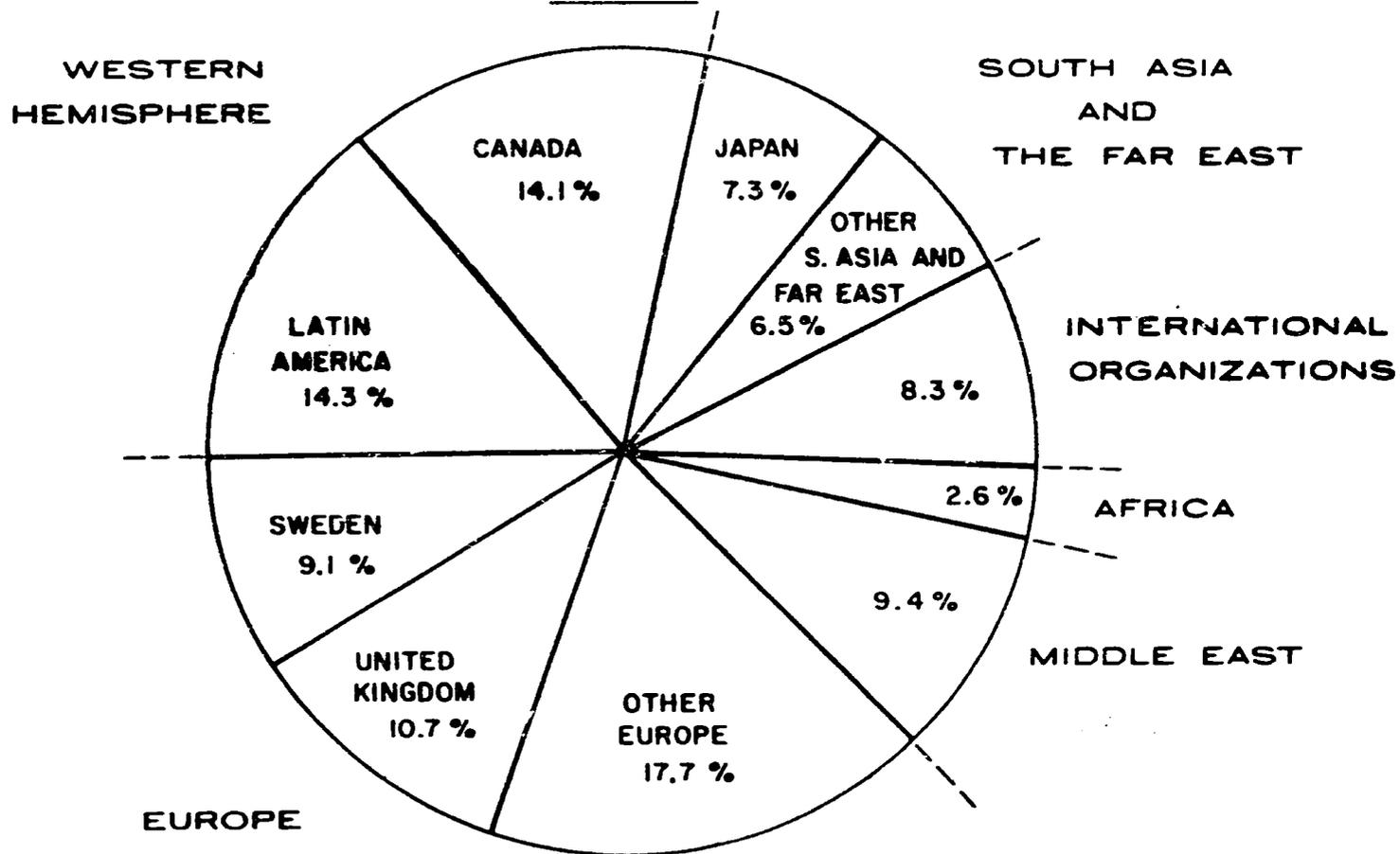
The international research program of the National Institutes of Health and the Bureau of State Services reached a peak in fiscal year 1963 with almost \$15.5 million expended. The program was budgeted for \$14.5 million in fiscal year 1964. (Chart II). An examination of the geographic distribution of the grants reveals that the developing countries and international organizations received approximately 41 percent of the grant funds in 1964 (Chart III).

The National Institutes of Health make a major investment in the training of scientific medical manpower from foreign countries. About 1,000 foreign graduate students or fellows are in the United States receiving stipends from domestic research grants. This program costs about \$9.5 million. The N.I.H. program for post-doctoral fellows brings a smaller group of investigators to the U.S. for advanced work and costs about \$1.2 million annually. Another \$1 million of N.I.H. funds is spent to pay the

Chart II  
RESEARCH GRANTS AWARDED BY NIH AND BSS  
TO FOREIGN INSTITUTIONS AND INTERNATIONAL ORGANIZATIONS BY FISCAL YEAR



**Chart III**  
**PERCENTAGE DISTRIBUTION OF FOREIGN RESEARCH GRANT FUNDS BY GEOGRAPHIC REGION,**  
**FY 1964**



costs of visiting scientists in the United States. The International Centers for Medical Research and Training (ICMRT) are located in five developing countries as overseas facilities of U.S. universities. This N.I.H.-sponsored program costs about \$2.5 million annually and it may be expanded to include a center in Sub-Saharan Africa. The present ICMRT are located in Pakistan, India, Malaysia, Costa Rica and Colombia.

The N.I.H. maintains two major overseas research laboratories. The first of these to be established was the Middle American Research Unit (MARU) in Panama. The MARU has carried out a variety of studies related to arbor virus infection and other diseases of significance in the developing countries. It made a significant contribution to the control of Bolivian Hemorrhagic Fever. The second unit, established more recently in Ghana, has investigated problems related to cancer.

It is not possible to estimate the number of N.I.H. grants for domestic research projects that involve activities outside of the United States. The program in tropical medicine and infectious diseases supported by N.I.H. includes projects in parasitic diseases, parasitic chemotherapy, tuberculosis, leprosy, tropical virology and diseases of animals transmissible to man. The budget for these projects totals about \$15.5 million per year. In addition to this program various of the N.I.H. Institutes conduct projects that have direct or indirect relevance for the developing countries. The Communicable Disease Center and the Audiovisual Facility of the P.H.S. also conduct studies on disease control and health manpower training that are of importance in the developing countries.

The other major divisions of the Public Health Service, such as the Bureau of State Services, the Bureau of Medical Services, the Division of Foreign Quarantine, the National Library of Medicine and the National Center for Health Statistics participate directly in international public health programs by the assignment of personnel to A.I.D., by technical support of A.I.D. programs, and through such direct activities as the library exchange program of the National Library of Medicine.

The Department of Health, Education and Welfare currently supports 87 projects overseas financed with local currencies generated by the sale of surplus agricultural products under Public Law 480. This research program includes a variety of projects in medicine, public health, child development and rehabilitation. More than \$21 million in local currencies has been authorized to support this program since 1961. During fiscal year 1964 projects were initiated in Brazil, Burma, India, Israel, Pakistan, Poland, United Arab Republic (Egypt) and Yugoslavia for a dollar equivalent of approximately \$2.5 million.

The Peace Corps is one of the three major governmental departments or agencies authorized to provide direct technical assistance in the developing countries. The Peace Corps has 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, Sierre Leone, Tanganyika, Malawi, Brazil, Bolivia, Colombia and the Dominican Republic. There are, in addition, over 70 Public Health Service medical officers assigned in 48 countries to provide medical care and preventive services for Peace Corps volunteers. The funds

to support the volunteer programs in medicine and public health were estimated to be \$2.5 million for fiscal year 1964. The Peace Corps has had hundreds of requests for assistance in medical care and public health programs but the limited budget and a dearth of physician volunteers has hampered further development of this program.

The Department of Agriculture supports many programs that are important for the health of 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 - provides for the sale of U.S. 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 for such U.S. uses as the research projects supported by the Department of Health, Education and Welfare.

Title II - authorizes grants of Commodity Credit Corporation stocks of farm products for domestic and foreign donation programs and for barter of equal value in strategic and other materials.

Title III - authorizes grants of Commodity Credit Corporation stocks of farm products for domestic and foreign donation programs and for barter of equal value in strategic and other materials.

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

The Agency for International Development is responsible for administration of the Title II program. 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 under

Title II for shipment to 37 countries.

The program under Title III authorized 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.

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.

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 A.I.D. and intergovernmental agencies. Although these are not direct health programs there are few that have more significance for health than the programs to increase food production.

The Department of the Interior budgeted about \$3 million in fiscal year 1964 for medical and public health services in American Samoa and the Trust Territories. 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.

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.

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.

The medical and health activities of the Atomic Energy Commission (A.E.C.) that have potential relevance in the developing countries arise mainly in the A.E.C.'s 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 U.N.

The research support provided by the National Science Foundation (N.S.F.) 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 N.S.F. budget in fiscal year 1964 was devoted to support of medical and health-related fields such as molecular biology, genetics, immunochemistry and metabolic biology.

The programs of the Veterans Administration in international health are three. First, is the payment by the Veterans Administration of about \$500,000 per year to the Veterans hospitals in the Philippines for medical services rendered beneficiaries. Second, the Veterans Administration has recently made graduating foreign medical schools eligible for residency training in U.S. Veterans hospitals. Third, the medical research program in parasitology, and tropical medicine at the Veterans Medical Center in San Juan, Puerto Rico has direct relevance to the health problems in developing countries.

The science information exchange program which the Smithsonian Institution operates on behalf of several agencies of the Federal Government serves as a clearinghouse of information about current research projects in medicine, biology, psychology and other life sciences. This program is important in international health because it helps to prevent duplication

of effort in research related to international health problems and it makes information available in such projects.

The health and sanitation projects of the Export-Import Bank have been described in an earlier section (Agencies that Help to Finance Foreign Aid and Trade).

#### THE AGENCY FOR INTERNATIONAL DEVELOPMENT

In order to examine the health and sanitation projects supported by A.I.D. in greater detail it is necessary to review briefly the operating principles of the Agency. The Foreign Assistance Act of 1961 created the Agency for International Development (A.I.D.) to carry out programs of economic and technical assistance as part of an integrated program of development and to coordinate these with military assistance programs. The creation of A.I.D. from the preexisting foundations of the International Cooperation Administration and the Development Loan Fund recognized the fact that the program is a multipurpose instrument of foreign policy, not a single or simple approach to the problems in developing nations. The foreign aid objectives were also clarified and programs planned within the framework of a broad analysis of each country's needs, resources and prospects for development. This analysis includes political, economic, socio-cultural and other factors.

The primary objective of the U.S. foreign assistance program is clearly mutual security among free nations. The program seeks to assist those countries that are trying to maintain their independence and develop into politically democratic, economically self supporting nations.

The objective of the health programs is not merely to teach new techniques, apply known public health practices, or to build new medical schools, hospitals, health centers and community water supplies, but to do these things in such a way that they stimulate or help people to carry their own burdens, to achieve lives of independence and to join in the common struggle of all mankind for a better life.

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

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 outstrip rates of growth in agricultural production and the effective distribution of available food

resources. The food need is particularly critical for infants and pre-school 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 A.I.D. involve more than 80 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 we are not supporting any health or sanitation projects directly in these countries.

2. Countries following reasonably effective development policies and making progress toward self-sustaining economic growth such as India, Pakistan, Turkey, Colombia and Nigeria.

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.

The health and sanitation programs supported by A.I.D. 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 purpose 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 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 A.I.D. health program in terms

of dollar grants and personnel will be in Vietnam. The focus of the program is on counter-insurgency 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 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.

The A.I.D. support for health programs 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 A.I.D. assistance.

Priorities in health programs supported by A.I.D. 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 in the world-wide malaria eradication program. The results of the malaria eradication program have been truly remarkable. During the last 15 years, the number of cases of malaria has been cut from a world-wide total of 350 million to fewer than 100 million. 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 be ill; it has reduced the cost of providing drugs, personnel, and facilities to treat patients with malaria, and it has opened large areas of land for agricultural production and the exploitation of natural resources. The U.S. contribution to this program has included direct participation in 27 different countries, as well as indirect assistance through W.H.O., P.A.H.O., and U.N.I.C.E.F. The U.S. has contributed \$180 million to this campaign since 1958. The present rate of U.S. financed assistance is approximately \$30 million annually. The U.S. now supports bilateral malaria eradication programs in 17 countries and it is the major contributor to W.H.O., P.A.H.O. and U.N.I.C.E.F.

Another major program aimed at an immediate health problem is the world-wide program to reduce morbidity and mortality from water-borne enteric 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 A.I.D. During the last four years more than \$392 million of external financial assistance has been provided to economically developing countries for water supplies. The A.I.D. 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 country) 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 continues to receive high-priority attention in terms of A.I.D. health programs. There have been an average of more than 500 health participants a year in the U.S. supported by A.I.D. Support has also been provided for medical and nursing education as well as the development of institutions for the education and training of health personnel at all levels from professionals to auxiliaries. 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 these obstacles assistance has been provided to Ministries of Health in terms of rural health services, public health administration, the organization and financing of health services and related fields.

The major fields supported by A.I.D. or predecessor agencies during the last twenty years have emphasized public health and health manpower development. The emphasis remains in the program projected for fiscal year 1965 with community water supply development, rural health services, malaria eradication and medical education topping the list (TABLE SEVEN).

TABLE SEVEN

SUMMARY OF HEALTH AND SANITATION PROJECTS  
PROGRAMMED FOR A.I.D. SUPPORT IN FISCAL YEAR 1965

<u>Type of Program</u>	<u>Number of Programs</u>
Community Water Supply	23
Rural Health Services	18
Malaria Eradication	14
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 projects proposed for fiscal year 1965 will require more than \$72 million (TABLE EIGHT). The Far East supports the largest program in terms of dollar assistance and personnel. Although large-scale financial assistance is programmed in Latin America for fiscal year 1965 there has been a rapid decrease in the number of health personnel in A.I.D. Missions and the number of health participants from Latin America represents less than 10 percent of the world-wide total.

TABLE EIGHT

FUNDING ESTIMATES FOR A.I.D.-SUPPORTED HEALTH  
AND SANITATION PROJECTS IN FISCAL YEAR 1965

<u>Regional</u>	<u>Dollars</u>
Far East	\$ 26,076,000
Africa	5,299,000
Near East South Asia	4,692,000
Latin America	21,179,000
 <u>Non-Regional</u>	
American Schools and Hospitals Abroad	12,300,000
Research (Health related)	1,000,000
General Technical Services and Support	
U.S. Public Health Service	610,000
American Hospital Association	30,000
Association of American Medical Colleges	54,000
Special Projects (Population, malaria)	1,200,000
Administrative	<u>250,000</u>
TOTAL	\$ 72,690,000

Although these programs are in 53 countries, major emphasis in health and sanitation projects in fiscal year 1965 will be in Vietnam, Indonesia, Laos, Thailand, India, Pakistan, Ethiopia and Brazil. The largest program in terms of personnel and direct dollar support will be in Vietnam. The largest single grant will be \$10.5 million to the American University of Beirut for construction of a teaching hospital. This is the second phase of the new medical center which will serve the Middle East and adjacent Asian and African countries and which has received a total of almost \$16 million of A.I.D. support.

The present projects call for an increase of A.I.D. health personnel from 279 to about 400. Of this number, almost one-half will be in Vietnam. About 80 U.S. personnel will be involved in the malaria eradication programs, and the remainder will be in the various other programs throughout the world.

#### NON-GOVERNMENTAL ORGANIZATIONS ACTIVE IN INTERNATIONAL HEALTH

The private organizations in the United States involved in international programs of public health, medical care, training, research and rehabilitation number in the hundreds and possibly thousands. These include private business and industry, private foundations, church groups, voluntary agencies, universities and hospitals. The missionaries have been involved in these programs for more than 100 years. The private foundations, particularly the Rockefeller Foundation, have played a major role for more than 50 years. Private industry and the universities have also been involved over a long period. Non-governmental organizations active in international health include private business and industry, private foundations, professional organizations, voluntary organizations, universities and hospitals (TABLE NINE).

TABLE NINE

NON-GOVERNMENTAL ORGANIZATIONS ACTIVE IN INTERNATIONAL HEALTH

1. PRIVATE ENTERPRISE

- a) Pharmaceutical manufacturers
- b) Chemical industry (DDT)
- c) Medical equipment and supplies
- d) Industries operating in developing countries (oil)

2. PRIVATE FOUNDATIONS

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

3. PROFESSIONAL ORGANIZATIONS

a) Medical Profession

- 1) World Medical Association
- 2) International Societies (e.g. Cardiology)
- 3) International Division, Department or program of domestic professional society (e.g. American Medical Association, American Hospital Association, Association of American Medical Colleges, American College of Physicians, etc.)

b) Other Health Professions

- 1) Dental
- 2) Nursing
- 3) Pharmaceutical
- 4) Health Education
- 5) Sanitary Engineering

c) Other Scientific

- 1) International Unions and Associations of Physiology, Biochemistry, Microbiology, etc.

TABLE NINE (Cont'd.)

4. VOLUNTARY ORGANIZATIONS

- a) Church organizations (medical missionaries)
- b) Voluntary health and welfare agencies (e.g. World Rehabilitation Fund, International Society for Welfare of Cripples, International Red Cross, American Red Cross)
- c) Non-Sectarian aid organizations
  - 1) CARE/MEDICO
  - 2) People to People Health Foundation (Project HOPE)
  - 3) Thomas Dooley Foundation
  - 4) Other organizations

5. UNIVERSITIES (including Schools of Public Health, Medicine, Nursing, Pharmacy, Dentistry, Engineering)

- a) Undergraduate and graduate students
- b) Faculty exchange
- c) University to University programs
- d) Research and research training
- e) Interns, residents, fellows

6. HOSPITALS

- a) Intern and residency
- b) Research

The contributions of private industry are probably the least appreciated by the people in the developing countries or by the general public in the United States. There are few chemical compounds more important in the world than DDT. This is a product of private enterprise. One of the most significant developments in nutrition in recent years has been the entry into the international fertilizer field of the major United States petroleum companies. The impact of this is just beginning to be felt, but in ten years we will look back and view this as one of the major factors in combatting malnutrition in the developing countries.

The Rockefeller Foundation needs no one to describe its many great contributions. It is the product of private enterprise. Many of the principles and techniques that have been applied in the mass programs of disease eradication or control were developed by individuals in the Rockefeller Foundation. In addition many leading scientists and important educational and scientific institutions have been supported by the Foundation. The Kellogg Foundation has made very significant contributions in support of health programs, particularly training in Latin America. 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 on reproduction and programs of family planning. There are an increasing number of private foundations supporting international programs. The total investment by the foundations in international programs now exceeds \$60 million annually. It is estimated that more than \$8 million is invested in public health or medical programs.

The role of professional organizations has long been very significant, but less tangible. There is a growing bond of kinship between professionals in the biomedical or health sciences throughout the world. This not only helps to promote more 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 major U.S. 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 clinics overseas. It annually sends more than \$2 million worth of drugs, supplies and equipment to these institutions. The American Medical Association has created an International Division and it is a major focal point for coordination and information exchange regarding needs for American physicians abroad. The Association of American Medical Colleges and the American Hospital Association both maintain active international divisions supported by grants from private foundations and contracts with A.I.D. The World Medical Society is planning its third World Congress on Medical Education for Social and Economic Development. The meeting is to be held in New Delhi in 1966.

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, microbiologists and biologists or other public health and medical workers, teachers or investigators. Many of these are the journals of professional societies that are

contributing very significantly to advances in public health and medicine throughout the world.

The role of voluntary agencies, like most of private enterprise, is often not adequately appreciated. A few of the programs such as CARE/MEDICO and Project HOPE are well known, but how many people realize that there are more than 195 non-profit organizations participating in technical assistance abroad in the fields of medicine and public health. There are 27 of these organizations that receive U.S. government assistance. The total investment abroad by these 145 voluntary organizations is probably in excess of \$500 million annually. It is impossible to estimate the exact expenditure in medicine and public health, but it certainly exceeds \$450 million, if the surplus food distribution, child feeding, famine and disaster relief programs are included. The Agency for International Development provides approximately \$4 million to U.S. voluntary agencies to ship an estimated \$80 million of supplies and commodities to about 80 countries. Under Title III of Public Law 480 approximately \$379 million of surplus foods provided by the Commodity Credit Corporation were distributed by voluntary agencies in 113 countries and territories to over 71 million people. Such organizations as the American National Red Cross, CARE, Catholic Relief Services, Church World Service and Lutheran World Relief carry out this humanitarian service.

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 last three years a series of steps have been taken by A.I.D. in attempting to develop

a more effective working relationship with universities. As a result of this effort an increasing emphasis on the role of the universities in A.I.D.-supported programs has developed. The broad picture of A.I.D.-university relations indicates an increasing participation by U.S. universities in A.I.D. supported programs (TABLE TEN). The number of universities involved has increased from 186 to 252 in less than 2-1/2 years. The cost of the university contracts has risen from \$121 million to \$177 million during this period. Not only is this increasing university participation making available to A.I.D. the resources of many U.S. universities but it is bringing to a large group of American educators experience abroad that will certainly pay dividends in a broader viewpoint for students and faculty alike. At the present time there are eight university contracts with U.S. medical schools in support of projects in developing countries.

TABLE TEN

SUMMARY OF CHANGES IN A.I.D.-UNIVERSITY CONTRACTS

	<u>Dec. 1961</u>	<u>Mar. 1964</u>
Total number of contracts with U.S. universities	186	252
Total number of U.S. universities involved	87	119
Number of contracts involving overseas programs	101	131
Number of U.S. universities engaged in A.I.D.- financed overseas projects	58	71
Number of U.S. universities having contracts for training in the United States	46	72
Total amount of university contracts (millions)	\$ 121	\$ 177

There are various ways in which U.S. universities assist in the creation of educational institutions or manpower resources in the developing countries:

(1) Through the education of undergraduates, graduate and post-graduate students in the United States. 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 students in medicine, dentistry, pharmacy, nursing, public health, biology or other health-related fields. There are, in addition, approximately 1,400 interns and 5,800 residents who are graduates of foreign medical schools in training in the United States.

(2) Through special exchange programs in the United States for foreign faculty or research scholars. For the academic year 1962-63 there were over 1,000 foreign medical or public health scholars or faculty members in the United States on academic assignments.

(3) Through university-to-university relationships where U.S. faculty members spend variable periods of time abroad teaching in the foreign institution and students and faculty from this institution come to the cooperating U.S. university.

(4) Research carried on either in the United States or abroad on matters relevant to patterns of disease, health, manpower, tropical agriculture, economic development and related problems facing the developing countries.

(5) Consultation and advisory services involving U.S. government agencies, multilateral agencies, foreign governments or institutions, private foundations, voluntary agencies and private industries in the

developing countries. It is difficult to estimate the number of medical or public health professionals involved in these activities, but certainly thousands are involved annually.

The hospitals of the United States also have a very significant role in foreign aid because of their internship and residency programs for graduates of foreign medical schools and because of their research programs. 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; African - 2 percent; and other areas - 1 percent. Although the majority of these physicians return home after this period of U.S.-oriented training, many of them either remain in the United States to practice, teach or do research or they return to the United States for one of these reasons a few years after returning home. Last year 19 percent of all physicians licensed to practice in the United States were graduates of foreign schools. It is apparent that the United States receives a great deal of technical assistance in medicine and public health from foreign nations, the majority still in the early stages of economic development.

### SUMMARY

This has been a brief review of the spectrum of nations; inter-governmental agencies; regional organizations; U.S. government agencies and private organizations and institutions involved in international programs of public health, medical care, training, research and rehabilitation. Emphasis was placed on the contributions of the United States to these programs, particularly through government agencies. There are four major departments of the Executive Branch of the U.S. Government, namely, State, Defense, Agriculture and Health, Education and Welfare involved. There is major U.S. support for such intergovernmental agencies as WHO, PAHO and UNICEF 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 U.S. and they, in turn, are a major source of financing for community water supply projects.

One of the most significant programs, the Food for Peace Program, was originally conceived as a device for distributing U.S. agricultural surpluses but it is becoming a major tool to aid development and to help meet the nutritional needs of selected high risk groups within the developing countries such as school and preschool children.

The non-governmental organizations which have made, and continue to make a most significant contribution to the improvement of the health of people throughout the world include private industry, private foundations,

professional societies and organizations, missionaries, voluntary agencies, universities and hospitals.

It is estimated that the U.S. government support of international public health, medical education, medical care, research and rehabilitation programs exceeds \$198 million annually. This is exclusive of the foreign currencies generated by repayment of loans and the sale of U.S. agricultural surpluses under Public Law 480, the nutritionally-focused aspects of the Food for Peace Program and the U.S. funds made available through the World Bank, the International Development Association and the Inter-American Development Bank (these latter three have averaged close to \$100 million annually in recent years).