

chapter 9

Financial Support for LDC Population Programs

Contents

	<i>Page</i>
Abstract	175
Introduction	176
Origins of Population Assistance From the United States	176
Origins of Population Assistance From the U.N. and From MDCs Outside of the United States	177
Support for Population Activities	178
Channels of Assistance	178
Kinds of Assistance	178
Roles of Assistance Agencies	180
U.S. Share of International Assistance	181
Components of U.S. Population Assistance	181
International Assistance to LDCs	184
LDC Support for Population Activities	188
Impacts of Population Assistance	189
Future Needs	193
Types of Assistance Appropriate to Various Countries and Regions	193
The Number of Couples of Reproductive Age in LDCs	194
Estimated Costs of Providing Family Planning Services and Supplies	195
The Countries in Which Population Growth Will Be Greatest in the Next Two Decades	196
Political and Other Considerations Governing the Distribution of U.S. Population Assistance	196
Chapter 9 References	197

LIST OF TABLES

<i>Table No.</i>	<i>Page</i>
45. Composite of Kinds of Assistance Provided by Major Assistance Agencies	179
46. AID Annual Budgets for Population Assistance, 1975-81	182
47. Principal Organizations Administering AID Population Funds, 1979	184
48. Total International Population Assistance Flows to 13 Most Populous LDCs, 1977-79	188
49. Degree of Support Provided by Selected LDCs for Population Activities/Number of Years Government and Private Agency Sponsored Services Available	189
50. Basis for Estimates of Population Support Costs in 1980 and 2000	194

LIST OF FIGURES

<i>Figure No.</i>	<i>Page</i>
25. Channels and Directions of International Population Funding and Technical Assistance	179
26. Primary Sources of International Population Assistance	182
27. U.S. Population Assistance in Actual and Constant Dollars	183
28. Distribution of Population Funds: 1965-79, 1980, 1981, 1982 (proposed)	183
29. Contributions to UNFPA by the United States and All Donors	185
30. Contributions to IPPF by the United States and All Donors	185
31. Regional Distribution of External Population Assistance, 1977-79	186
32. Kinds of Population Assistance to Africa, 1979	186
33. Kinds of Population Assistance to Asia, 1979	186
34. Kinds of Population Assistance to Latin America, 1979	187
35. Kinds of Population Assistance to Middle Eastern/Mediterranean Region, 1979	187
36. Trends in Monetary Population Support in Indonesia	188

Financial Support for LDC Population Programs

Abstract

In 1980, total resources committed to population and family planning programs in less developed countries (LDCs) amounted to about \$1 billion; \$450 million came from more developed countries (MDCs) governments and international agencies, \$100 million from private organizations, and \$450 million from LDCs themselves (excluding China). The largest providers of international population assistance today are the U.S. Government through the Agency for International Development (AID), the United Nations Fund for Population Activities (UNFPA), the International Planned Parenthood Federation (IPPF), and the World Bank. The United States provided over 50 percent of all population assistance prior to 1973, but this share has since leveled off to about 40 percent, where it has remained for the last 4 years. Several of the Scandinavian countries, Japan, and West Germany have increased their population assistance donations by 30 to 60 percent over the past few years; as of the end of fiscal year 1981 the U.S. contribution had risen only 6½ percent since 1978. Inflation has also cut the purchasing power of AID's population assistance efforts to below that of the peak year of 1972 (\$121 million). AID obligates international population assistance to LDCs through four major channels: 1) bilaterally to LDC governments; 2) multilaterally to UNFPA; 3) indirectly through private U.S.-based intermediary organizations; and 4) through contributions to the private multilateral IPPF. The U.S. contribution to the World Bank is authorized separately by Congress; the Bank then administers population projects as components of its total development program.

About 75 percent of international population assistance from all sources is provided for family planning services, including contraceptive supplies. The remaining 25 percent supports information and education activities, policy development, data collection, institutions and training, and research efforts. In 1979, Asia received the largest share of population assistance (60 percent); followed by Latin America (20 percent), Africa (12 percent) and the Middle East (8 percent). International population assistance has had diverse impacts over the last two decades. More people are aware of the problems associated with rapid population growth; data of better quality are available to enable governments to formulate policy; countries are becoming increasingly self sufficient and taking greater financial and administrative responsibility for their family planning programs as they mature. The strongest impact has been on fertility rates, which have begun to decline and are declining more rapidly in countries with strong family planning programs. Despite this recent decline in fertility rates, high fertility persists in many LDCs. Their populations also have enormous momentum for growth because of their youthful age structures. In the next 20 years there will be a 65-percent increase in the need for contraception as increasing numbers of couples enter their childbearing years. Excluding China, in the year 2000 some 495 million couples of reproductive age (compared, with 300 million in 1980) will need contraceptive protection if population growth is to stabilize. Using conservative present-day family planning cost estimates as a base (\$15 per couple) the cost of achieving replacement fertility today would be \$4.5 billion annually. The cost of this achievement in 2000, in 1980 constant dollars, would rise to \$7.4 billion. Under this formula, the amount rises to \$10.7 billion when China's childbearing-age population is added.

Introduction

International assistance for population and family planning programs in LDCs today comes from three major sources: private organizations, national governments, and intergovernmental agencies. Most of these agencies took on this role during the 1960's, when the implications of rapid population growth emerged as a worldwide concern. During the 1970's, these agencies, working in a generally cooperative way, assumed different functions in the com-

plex and expanding field of population assistance. They operate in different ways both because the LDCs and regions are at varying stages of their demographic transition to lower birth and death rates, and because the complexity and sensitivity of population issues require a mix of programs and agencies to enable each country to have access to one or more sources that meet their needs.

Origins of population assistance from the United States

Awareness of the magnitude of population growth in LDCs grew gradually during the late 1950's and early 1960's. Statements from the countries themselves heightened this awareness, as did the activities of such organizations as the Population Council and the United Nations (U. N.). The U.N. published its first *Demographic Yearbook* in 1949 and its first series of population projections in 1952, which forecast a 1980 world population of 3.6 billion. This total was revised upward in 1957 to 4.2 billion.

India adopted a national family planning policy in 1951 and Pakistan included demographic policy and family planning activities in its national development plan in 1955. Demographer Ansley Coale and economist Edgar Hoover built a population growth model in 1958 which demonstrated that family planning expenditures would, over various intervals, increase per capita income to a greater degree than any other type of government investment. Although this model was developed for India, its message to other LDCs was clear: a reduced rate of population growth would always mean additional funds for capital investment because there would be fewer dependents and smaller expenditures for consumption and social needs. The actions taken by India and Pakistan, and the activities of private organizations and the U. N.,

heightened public recognition of the hazards of rapid population growth.

Until the mid-1960's, private agencies played the major role in international population assistance. These agencies were of two types: activist citizen organizations like the International Planned Parenthood Federation (IPPF), established in 1952, and the Pathfinder Fund, established in the 1930's, in which business leaders and community workers merged to promote public recognition of population problems and provide family planning services directly to those who wanted them; and professional scientific organizations like the Population Council, also established in 1952, which focused on specialized demographic and biomedical research and then on technical assistance as requested. Private donors—individual philanthropists and such major foundations as Ford and Rockefeller—provided financial support for these scientifically oriented programs. Princeton, North Carolina, Michigan, and Johns Hopkins Universities, with this help, were able to develop training programs for population/family planning specialists.

Although private agencies had been seeking Government support for more than a decade, several factors combined in the 1960's to stim-

ulate official concern and to prompt the first U.S. public support for population assistance. The 1960 round of censuses showed high rates of population growth in LDCs, especially in Asia. The governments of Pakistan and India had by the 1960's begun to ask the United States and other MDCs for help. The U.N. Population Commission and the U.N. Economic Commission for Asia and the Far East brought population issues to international attention.

Within the U.S. Government, such expert advisory groups as the Draper Committee (in 1959) recommended that the U.S. provide assistance for population planning at the request of LDCs. The election of John F. Kennedy in 1960 as the first Catholic President of the United States helped defuse religious issues and brought to power an administration that viewed population growth as a national policy matter.

The food crisis that developed in South Asia in the mid-1960's also spurred U.S. Government concern. Members of Congress had initiated the Food for Peace Program (Public Law 480) in 1954 and were following international food de-

velopments closely. The news that food production in many LDCs was failing to keep pace with population growth was highlighted in House and Senate hearings. As a result, the Congress took the initiative in 1963 and again in 1966 and 1967 to provide specific legislative authority for the United States to assist LDCs with their population growth problems.

The AID population assistance program, first created by Congress as a part of a concerted War on Hunger, and then as an important element of humanitarian and social development, grew from a \$5 million effort in 1965 to one of \$190 million in 1981. From the beginning, the U.S. program has made extensive use of private organizations. Influenced by both the important role of private voluntary agencies in other assistance efforts and by the fact that until the mid-1970's many LDC governments were not yet ready to adopt bilateral assistance for official population programs, AID and other donors support a network of private agencies that provide family planning services, training, information, and education; demographic and policy data; and public health research.

Origins of population assistance from the U.N. and from MDCs other than the United States

The government of Sweden, the first to give assistance to an LDC for family planning, supported pilot projects in Sri Lanka in 1958 and Pakistan in 1961. The United Kingdom followed with small-scale assistance programs in India and Pakistan in 1964. Denmark made its first official grant in 1966 in support of a pilot study to test the suitability of a Danish IUD for India's national family planning program. The Netherlands offered bilateral support to a family planning project in Kenya in 1968. The Federal Republic of Germany and Finland followed in 1969 with support to multilateral programs and Canada, Japan, and Norway joined in the effort in the early 1970's.

International agencies had meanwhile begun to respond to LDC needs for population assist-

ance. Although the impetus for response to international population problems came from a number of U.N. agencies, a viable U.N. unit with a specific mandate in the field of population did not exist until 1969 when the U.N. Fund for Population Activities (UNFPA) became a separate unit within the U.N. Development Programme (UNDP). Following the unanimous General Assembly Resolution in 1966, a trust fund was established to become UNFPA, and operational activities began 3 years later.

Within the U.N. system different offices and agencies have different responsibilities for the execution of population programs: the Statistical Office gathers statistics and the Population Division conducts research on population issues and makes demographic projections; the World

Health Organization provides technical expertise for assistance to maternal and child health and family planning services; UNESCO deals with population education and communications; UNDP provides general development assistance on request but relies on UNFPA for population expertise.

Most U.N. agencies depend on contributions assessed from member nations on a population/income formula and are reluctant to start new programs without additional funds. Their governing bodies and staff were at first apprehensive about the political implications of a program that might be controversial. Established first as a trust fund of the Secretary-General and entirely dependent on voluntary contributions from interested governments and on the technical expertise of other agencies, UNFPA came into being with a minimal mandate in a field where responsibilities were fragmented and bureaucratic rivalries strong.

UNFPA uses a broader definition of population planning than does AID's Office of Population. UNFPA programs, often in conjunction with LDC health ministries, focus on migration,

mortality reduction, and maternal and child health (MCH) activities in addition to fertility planning, while the AID Office of Population, as legislated by Congress, is primarily concerned with family planning activities. Separate accounts within AID handle health activities.

The World Bank initiated a population program in 1969. The Bank, which has more development resources than any other international agency, deals with high level finance and planning officials in LDCs. Population planners hoped this influence would be used within LDC governments to provide more support for population programs, but banking officials have remained skeptical of such programs; less than 1 percent of Bank resources have been directed toward population projects in recent years. About 20 population projects totaling \$400 million have been initiated since 1969 through the Bank's International Development Association (IDA) and International Bank for Reconstruction and Development (IBRD), and the Bank is now working to integrate population, health, and nutrition projects to provide a broader operating base.

Support for population activities

Channels of assistance

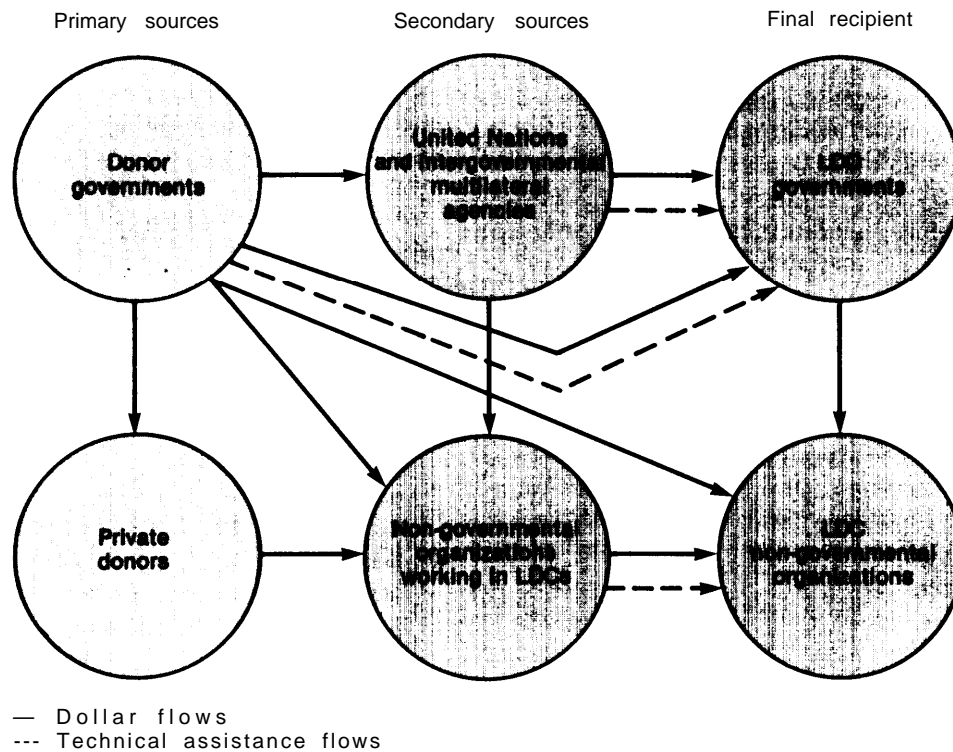
Donor governments are the principal sources of population assistance. Most smaller donors contribute only to UNFPA or to other U.N. programs, but larger donors such as the United States, the Scandinavian countries, Germany, Japan, Britain, and Canada have contributed in three ways: 1) to private intermediaries or non-governmental organizations (NGOs), i.e., IPPF and the Population Council; 2) directly to LDC governments through bilateral loans and grants; and 3) to UNFPA. UNFPA contributes in turn to LDC governments and also provides a small amount of support for private intermediaries and for global activities, such as conferences (see fig. 25).

Private sector donors contribute primarily to NGOs such as IPPF, the Population Council, the

Pathfinder Fund, and Family Planning International Assistance (FPIA). These in turn provide both funds and advisory personnel to local organizations within LDCs. Some international private agencies, like IPPF and the Population Council, also make expert advisory personnel available to assist LDC governments or to organize U.N. or global programs such as the 1974 World Population Conference in Bucharest and the 1981 conference in Jakarta on Family Planning in the 1980's.

Kinds of assistance

Kinds of population assistance, although not strictly comparable, can be grouped under six functional headings (see table 45): 1) *family planning services*—purchasing and distributing contraceptive commodities, and providing support

Figure 25.—Channels and Directions of International population Funding and Technical Assistance

SOURCE: Office of Technology Assessment.

Table 45.—Composite of Kinds of Assistance Provided by Major Assistance Agencies

Office of Technology Assessment composite	AID	UNFPA	IPPF	World Bank
Family planning services	Family planning services, commodities	Family planning programs, services and training	Medical, health services, commodities	Delivery of services, management, construction
Information, education, and communication (IEC)	Information, education, communication	Communication education	Information, communication	Information, education, communication, motivation
Institutions and training	Institution building, training	Population dynamics,	Training	Training
Research and evaluation	Biomedical and operations research	Population determinants Multi sectoral activities	Evaluation	Research and evaluation
Policy development	Policy development, social science research	Formulation and implementation	Special projects	—
Data collection	Demography	Basic population — data collection	—	—

SOURCES: Annual reports of each agency, AID Congressional Presentation, 1980.

for family planning program management and operations, personnel, and equipment (AID, UNFPA, IPPF, and World Bank all expend close to half or more of their population funds for family planning services, and the Bank includes clinic construction in this category); 2) *information, education, and communication* (IEC)—informing or educating the public about family planning, contraceptive methods, and the implications of rapid population growth; 3) *institutions and training—teaching* and training of clinic personnel, midwives, and family planning practitioners; 4) *research and evaluation—sponsoring* biomedical and social science research activities, family planning program evaluation, and operations research; 5) *policy development*—conducting leadership awareness activities in the government and private sector in LDCs (AID also includes research on fertility determinants and women's roles); and 6) *data collection—gathering, analyzing, and disseminating* relevant population information through censuses and surveys.

Roles of assistance agencies

The private agencies (Population Council, IPPF, FPIA, AVS, etc.) are major innovators in service delivery, training, and research. For example, IPPF, FPIA, and others initiated community-based distribution (CBD) of contraceptives—usually condoms and pills—by networks of local community leaders. The Ford Foundation initiated contraceptive sales activities in LDCs through retail storekeepers. Private agencies and universities have trained and equipped physicians in newly simplified techniques of female sterilization, and were the first to establish collaborative international research networks to pool data and evaluate new contraceptive technologies in a pattern now being expanded by WHO. They have tested new computer techniques for storing and retrieving population data and presenting these data visually to government leaders, and have experimented with women's programs to develop women's management skills and spread awareness and knowledge of family planning. In countries where population policies are in flux, pri-

vate family planning associations have provided a measure of continuity.

The role of international agencies is necessarily different, and less experimental. UNFPA, for example, works with other U.N. agencies and national governments to fund efforts to build national capacity to formulate and implement population policies and programs. UNFPA has served three main population assistance functions that supplement and complement U.S. Government efforts:

1. As a multilateral agency, UNFPA has been able to stimulate substantial additional funding for population assistance. Of the more than 85 governments that have contributed to UNFPA, fewer than 10 have separately staffed bilateral population assistance programs. Most would probably have made little contribution to population programs had they not had the opportunity either to contribute directly to UNFPA or to support multilateral-bilateral projects combining national funds and UNFPA-U.N. specialized agency monitoring and expertise.
2. The various international agencies, including UNFPA and the World Bank, have helped to define rapid population growth as a global concern, an obstacle to economic development, and a problem in need of high level national attention. Their efforts underscore the fact that population assistance is a cooperative response to an international need. Whether the immediate issue is rapid urbanization or high levels of unemployment, UNFPA has called government attention to the underlying demographic causes and made assistance available to address the problem at hand. World Bank officials can articulate the adverse economic impacts of rapid population growth while working with the planning and finance ministries that set government budgets.
3. International agencies can mobilize technical assistance to help LDCs help each other. Even though national programs may suffer temporarily if skilled people leave to join these agencies, these experts can bring

their specialized experience to bear on similar problems in other LDCs, where it is likely to carry more weight than advice from MDC governments that have not faced comparable population problems. Through this process of mutual support, LDCs can move toward greater self-sufficiency.

Among these channels of population assistance, AID has played a multiple role. As one of the first and still the largest of government assistance programs, AID has provided part of the basic strategy for population programs. AID's strategy is based on the established public health principle of availability-making information, supplies, and services readily available so that individuals who choose to plan their fertility can do so conveniently. As a result, AID has been the principal supplier of contraceptives, purchasing in bulk from U.S. firms at low competitive prices. (For example, AID now pays \$0.15 for a cycle of oral contraceptives that would otherwise wholesale in an LDC for about \$3.50.) Through the use of intermediary agencies, AID has encouraged CBD of contraceptives and other cost effective approaches for the delivery of family planning information and supplies to rural populations that lack access to clinic-based services. In addition, AID has been responsible for many major improvements and innovations in the field of fertility planning technology.

The AID program has been both a catalyst and a stimulus to other agencies in developing such projects as the World Fertility Survey, which is also supported by UNFPA and other governments. AID's efforts have encouraged other governments and agencies to improve their programs, and universities, private agencies, LDC governments, and the World Bank to undertake more intensive efforts in program implementation.

U.S. share in international assistance

Less than 2 percent of official development assistance from all MDC donors is currently allocated to population activities, which represents a small decline since 1970. The United States provides just under 4 percent of its global de-

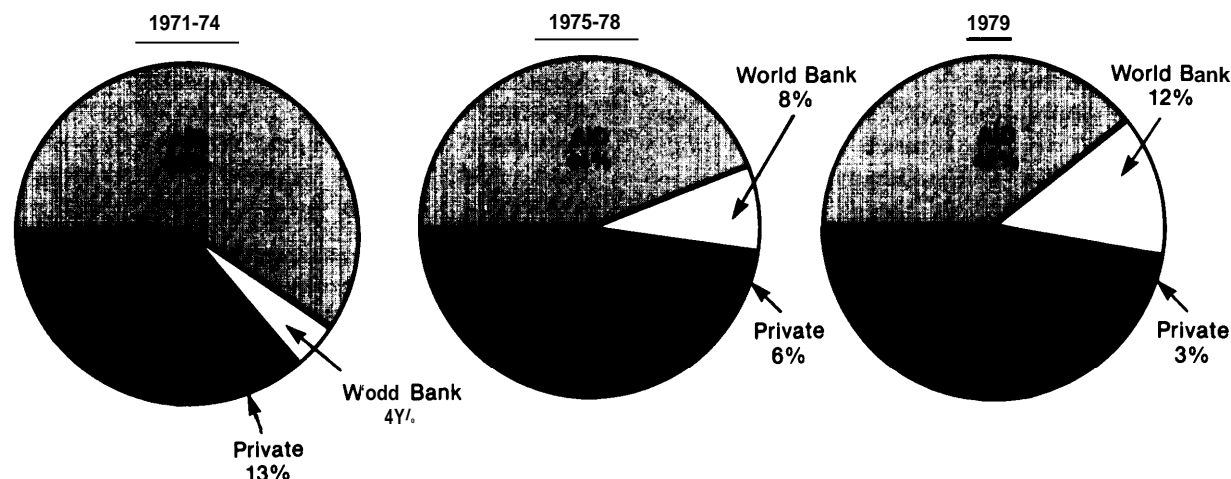
velopment assistance for population activities. In 1980, total resources committed to population and family planning programs in LDCs amounted to about \$1 billion. LDC contributions accounted for about \$450 million in 1980, excluding China; roughly \$550 million originated externally as international population assistance. (See app. A for China expenditures.)

MDC governments over the last decade have consistently generated more than 80 percent of all international population assistance; the remainder has originated with the World Bank and private sources. Among MDC donor countries, the United States, through AID, continues to be the largest contributor of population assistance. The United States provided 50 percent or more of all primary source assistance until 1973, when the U.S. share of this funding decreased and the portion provided by other sources increased (see fig. 26). By the mid-1970's, the U.S. share leveled off to about 40 percent, and has remained at this level for the last 4 years. This decrease is largely due to increased contributions from other MDCs. Several of the Scandinavian countries, Japan, and West Germany have increased their funding over the past few years by 30 to 60 percent. United States funding for population assistance has increased only 61/2 percent since 1978 after having increased by 40 percent between 1975 and 1978 (see table 46). The impact of inflation has cut today's funding level—in constant dollars—to below that of the peak year of 1972. In that year Congress provided AID with a budget of \$121 million. Inflation has cut the value of AID's 1981 appropriation of \$190 million to about \$100 million, and the 1982 appropriation of \$211 million is \$28 million below the amount required to maintain the 1972 level (see fig. 27).

Components of U.S. population assistance

AID obligates its population assistance through four channels: 1) direct bilateral from AID to LDC governments; 2) indirect bilateral through U.S.-based private organizations to NGOS in LDCs; 3) intergovernmental multilateral (e.g., UNFPA), in which MDC donations are

Figure 26.—Primary Sources of International Population Assistance



SOURCE: *UNFPA Report on Population Assistance, 1979*—Table 1. Percentages refer to expenditure data with some exceptions: 1) AID data prior to 1979 reflect commitments; and 2) World Bank percentages reflect loan credit agreements committed in a particular year, but disbursed over several years of project duration.

Table 46.—AID Annual Budgets for Population Assistance, 1975-81 (in millions)

Year	Budget	Percent increase over previous year
1975.....	\$106.0	—
1976.....	119.0	11%
1977.....	145.4	18
1978.....	177.6	18
1979.....	184.9	4
1980.....	185.0	0
1981.....	190.0	3

NOTE: Figures and percentages reflect actual dollar figures, not allowing for inflation.

SOURCES: *UNFPA Report on Population Assistance, 1979*, table 1, for years 1975-79. AID table 500 for years 1980, 1981. Figures represent commitments.

pooled and redistributed to LDC governments and NGOs; and 4) private multilateral (IPPF), in which donor funds are pooled and redistributed to IPPF affiliates in LDCs (see fig. 28). The United States also contributes to the World Bank, but this separate authorization from Congress is not channeled through AID.

DIRECT BILATERAL

In calendar year 1979, the latest year for which complete data are available, about \$48 million (26 percent of the AID population budget) went directly to 33 LDC governments: 11 each in Africa and Latin America, 8 in Asia, and 3 in the Middle East. In 1979, the largest recipi-

ents of U.S. bilateral aid for population activities were:

	Millions of dollars
Indonesia	\$11.4
Bangladesh	4.0
Philippines	2.4
Tunisia	1.8
Thailand	1.7
Nepal	1.7

INDIRECT BILATERAL

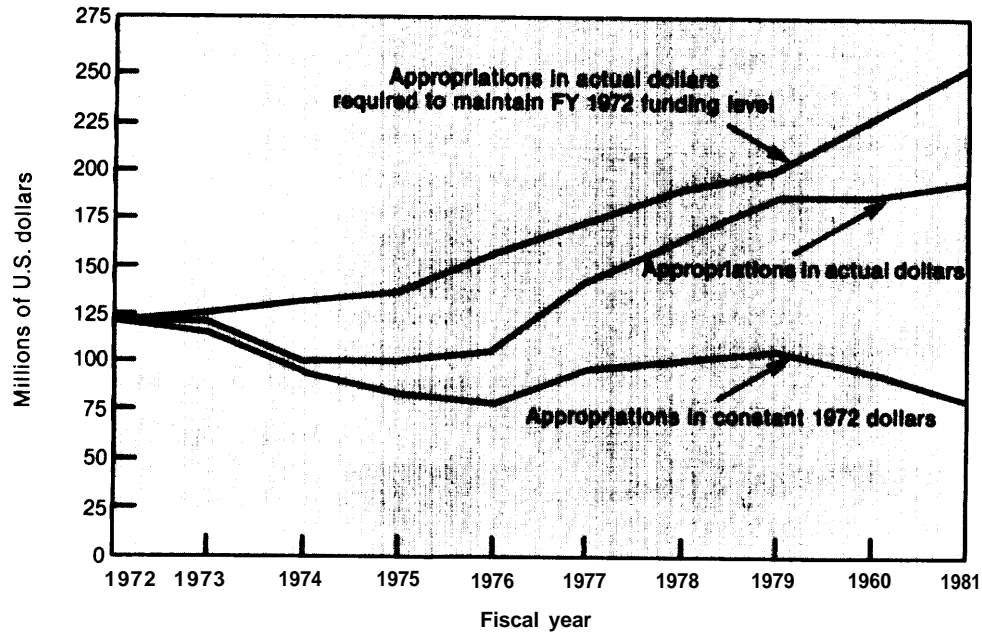
In 1979, some \$90 million (52 percent of the AID population budget) went to private intermediary organizations. Eighty-five percent of this assistance was channeled through 14 agencies (see table 47), which provide substantial amounts of technical assistance to countries where bilateral assistance is not always appropriate. U.S.-based NGOs provided technical assistance to 64 LDCs in 1979: 22 in Africa, 19 in Latin America, 14 in Asia, and 9 in the Middle East.

INTERGOVERNMENTAL MULTILATERAL

In 1979, the United States contributed about \$30 million (16 percent of the AID population budget) to UNFPA. This constituted 27 percent of UNFPA's budget. UNFPA grants went to 116 LDCs in 1979: 37 in Africa, 31 in Latin America, 28 in Asia, and 20 in the Middle East/Mediterra-

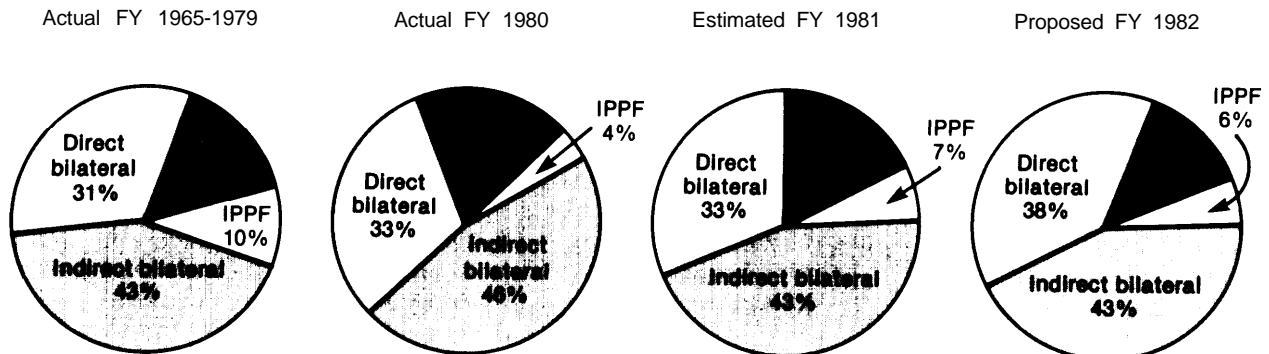
Figure 27.—U.S. Population Assistance in Actual and Constant Dollars

Population assistance fiscal years 1972-81 in actual and constant (1972) dollars



NOTE: Actual dollar levels exclude operating expenses except when these were combined with program funds.

SOURCE: Agency for International Development.

Figure 28.—Distribution of AID Population Funds: 1965-79, 1980, 1981, 1982 (proposed)

SOURCE: AID, Congressional Presentation, FY 1980, Annex VII, Table 400—Population Program Assistance by Major Organizations: Funding Allocations FY 1965-80: December 1979.

Table 47.—Principal Organizations Administering AID Population Funds, 1979

Intermediary organization	Estimated expenditures from AID for fiscal year 1979 (in millions)
Family Planning International Assistance (FPIA)	\$14.0 ^a
Association for Voluntary Sterilization (AVS)	7.7 ^a
Johns Hopkins Program for International Education in Gynecology and Obstetrics (J HPIEGO)	7.2
Pathfinder Fund ^b	6.7 ^a
International Statistical Institute (World Fertility Survey)	5.0
International Fertility Research Program (IFRP)	4.2
Development Associates	3.0
Westinghouse Health Systems	2.9
University of North Carolina	2.2
Johns Hopkins University	1.6
Population Council	1.6
Battelle Memorial Institute	1.5
Program for Applied Research on Fertility Regulation (PARFR)	1.1
East-West Center	1.0

^aRefers to actual expenditures.^bAlso receives substantial funding from private sources.

SOURCE: AID Congressional presentation, 1980; Personal communications with Family Planning International Assistance, Association for Voluntary Sterilization and Pathfinder Fund.

nean. Those countries receiving the largest grants from UNFPA in 1979 were:

	Millions of dollars
India	\$17.0
Vietnam	4.9
Bangladesh	4.5
Thailand	3.0
Egypt	2.4

In 1980, the U.S. share of contributions to UNFPA fell to 26 percent of its budget where it remained during 1981. This marks the lowest point of declining U.S. input to this agency (see fig. 29).

PRIVATE MULTILATERAL (IPPF)

The remaining \$22 million (12 percent of the 1979 AID population budget) was channeled through IPPF. * This represents 28 percent of IPPF's total operating budget and, as in the case

● Note: This was not a representative year for the IPPF appropriation from AID. The figures for 1978 and 1980 were about \$10 million less.

of UNFPA, is a proportional decline of U.S. input since 1970 (see fig. 30). IPPF provided grants to 88 private family planning affiliates in LDCs in 1979: 21 in Africa, 32 in Latin America, 20 in Asia, and 15 in the Middle East.

The countries receiving the largest grants from IPPF during calendar year 1979 were:

	Millions of dollars
Brazil	\$3.4
Colombia	2.9
India	2.0
Mexico	1.4
Republic of Korea	1.2

International assistance to LDCs

The quantification of dollar flows from MDC governments and international agencies to specific LDCs cannot be precise because:

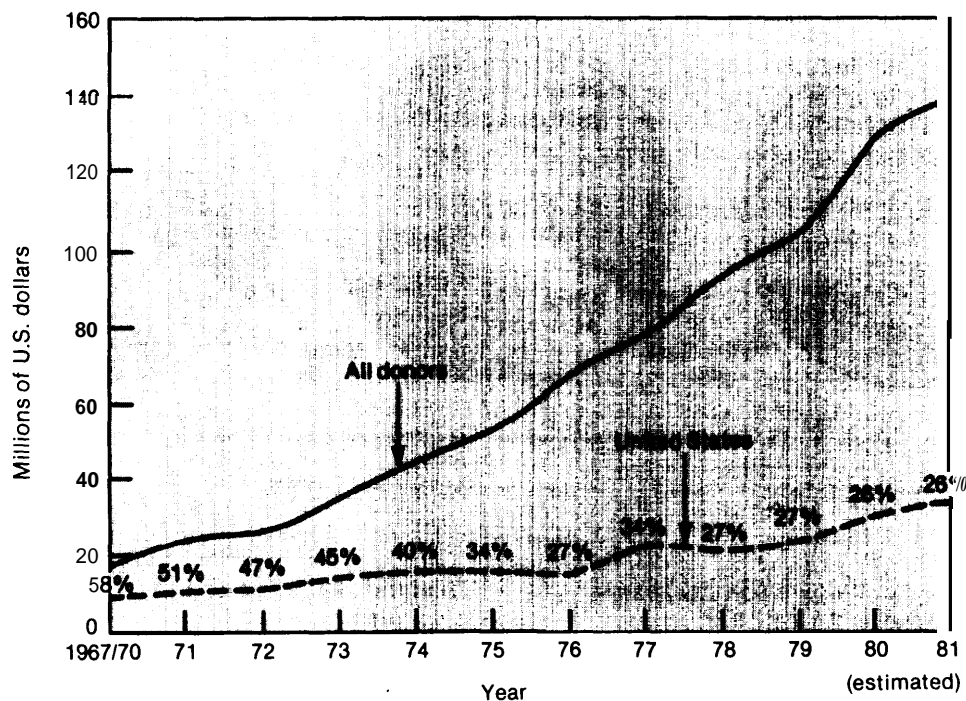
- funds that pass through a variety of agencies are often commingled, making identification of initial donors difficult;
- interpretations vary as to what international population assistance is, as opposed to, for example, MCH assistance;
- different accounting methods, fiscal years, and exchange rates are used; and
- commitments span several years and are often reprogrammed through continuing evaluation and review processes, making identification of given-year expenditures exact.

The relative proportions of all external population assistance to each region were fairly constant from 1977 through 1979, with Asia receiving the greatest share (see fig. 31). Excluding funds for regional, interregional, and global purposes, country-specific dollar expenditures increased from \$208 million in 1977, to \$232 million in 1978, to \$280 million in 1979 (see table A-3, app. A) for total amount of external assistance to each LDC).

AFRICA

Total average international assistance to Africa during 1977-79 for all population activities remained at about \$0.09 per capita per year. Almost half of this aid came from UNFPA. Among African countries, Kenya and Tanzania received the largest population assistance grants,

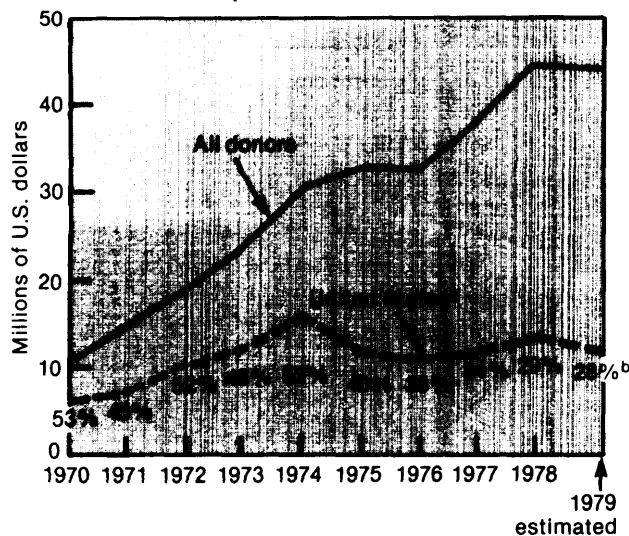
Figure 29.—Contributions to UNFPA by the United States and All Donors



SOURCE: UNFPA Financial Data Sheet, prepared by S. Mousky, February 1981.

Figure 30.—Contributions to IPPF by the United States and All Donors

International Planned Parenthood Federation income and expenditures 1970-79

^aIncludes in-kind commodities.^bFunding brought forward to 1980 not included (approx. \$10 million).

SOURCE: IPPF: London, 1980

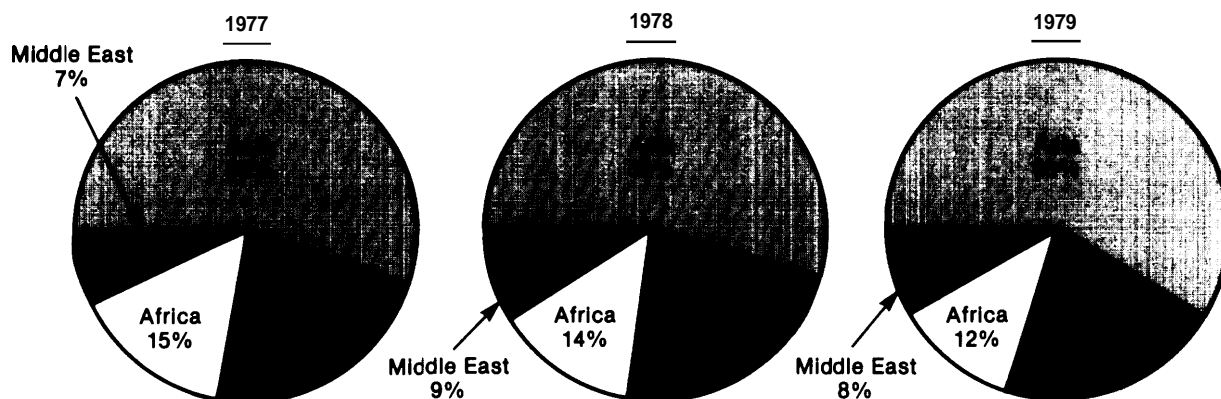
averaging \$0.59 and \$0.22 per capita per year, respectively, over the 3-year period. West African countries received less: Nigeria, \$0.03 per capita; Niger, \$0.04; Upper Volta, \$0.01; and Cameroon, \$0.04.

African countries either do not generally recognize rapid population growth as a problem or are at early stages of program development. Population assistance to Africa, relative to other regions, places greater emphasis on demographic data collection, IEC, and family planning in the context of maternal and child health. Nevertheless, family planning services and commodities accounted for 58 percent of all assistance to Africa in 1979 (see fig. 32).

ASIA

Per capita population assistance (excluding China) rose from \$0.09 in 1977 and 1978 to \$0.12 in 1979. Because Asia contains 8 of the 13 most populous countries in the world, and because Asian countries have the longest history

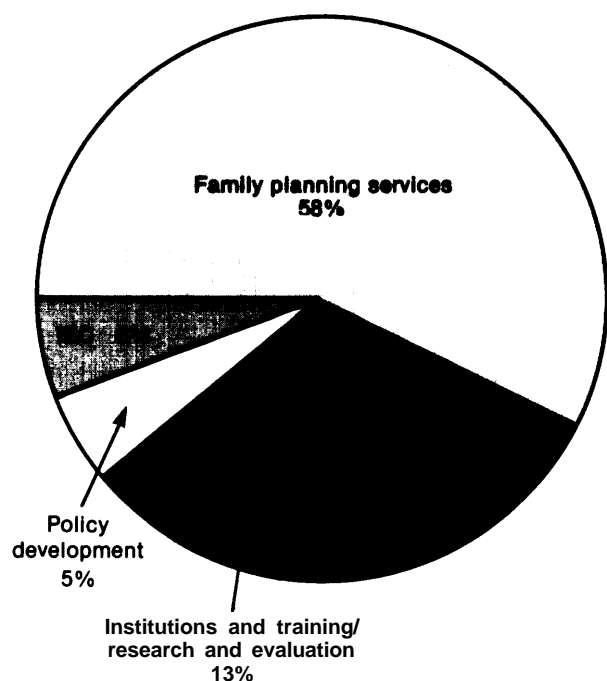
Figure 31.—Regional Distribution of All External Population Assistance, 1977=79



NOTE: Percentages include funds channeled to specific LDCs; funds for regional, interregional, and global activities designated for particular regions are also included.

SOURCE: UNFPA Table 2—Assistance to Population Programs by Country and Region by Major Donors, 1977-79.

Figure 32.—Kinds of Population Assistance Provided to Africa, 1979

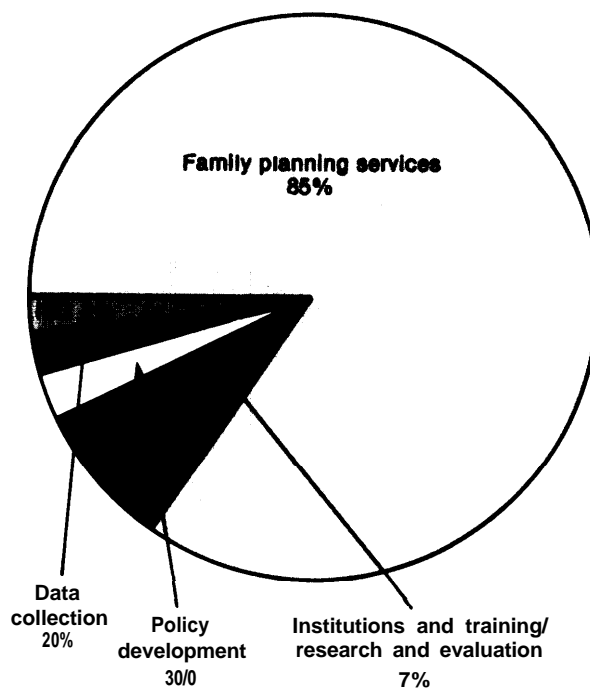


SOURCE: Percentages derived from: UNFPA Report on Population Assistance, 1979-Table 3—Assistance to Population Programs by Country and Region and Major Population Sector.

of government-sponsored programs, more funds flow into this region. In 1979, 90 percent of all international population assistance to Asia came from U.N. agencies and direct bilateral donors. Bangladesh received \$0.49 per capita,

Thailand \$0.38, and the Philippines \$0.28. A large portion of assistance to Asia has been earmarked for expansion of services and purchase of commodities (see fig. 33).

Figure 33.—Kinds of Population Assistance Provided to Asia, 1979



SOURCE: Percentages derived from: UNFPA Report on Population Assistance, 1979-Table 3—Assistance to Population Programs by Country and Region and Major Population Sector.

LATIN AMERICA

Latin American countries rely extensively on intermediaries for population assistance. In 1979, IPPF and the Ford and Rockefeller Foundations provided 36 percent of population assistance to Latin America. NGOs provided 53 percent of the \$9.7 million contribution to Brazil, 44 percent of the \$11.2 million contribution to Colombia, and 65 percent of the \$8.3 million contribution to Mexico. Although Latin American countries received less total population assistance than Asia in 1979, per capita averages were higher (about \$0.19); relative proportions of assistance were similar, with most funds spent on family planning services (see fig. 34).

MIDDLE EAST/MEDITERRANEAN

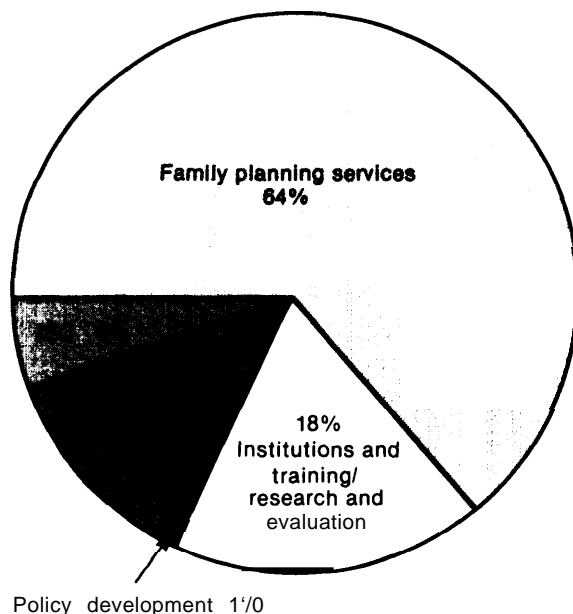
Middle Eastern and Mediterranean LDCs received the smallest share of international population assistance of all major regions over the last few years. Although total country-specific assistance in this region grew 62 percent between 1977 and 1979, from \$14.4 million to

\$23.3 million, the relative share of total world population assistance remained at only 8 percent. Total per capita population assistance in 1979 amounted to about \$0.12. UNFPA contributed more than half of this assistance through large grants to Egypt, Jordan, and Tunisia. Egypt also obtained substantial World Bank support during the late 1970's and 1980-81. Tunisia received one of the largest per capita population assistance donations in 1979 (\$0.78), principally from AID and UNFPA. Like Africa, the Middle Eastern/Mediterranean region is at a comparatively young stage of policy and program development, and data collection for increased demographic awareness is a major focus of population activities (see fig. 35).

THE 13 MOST POPULOUS LDCS

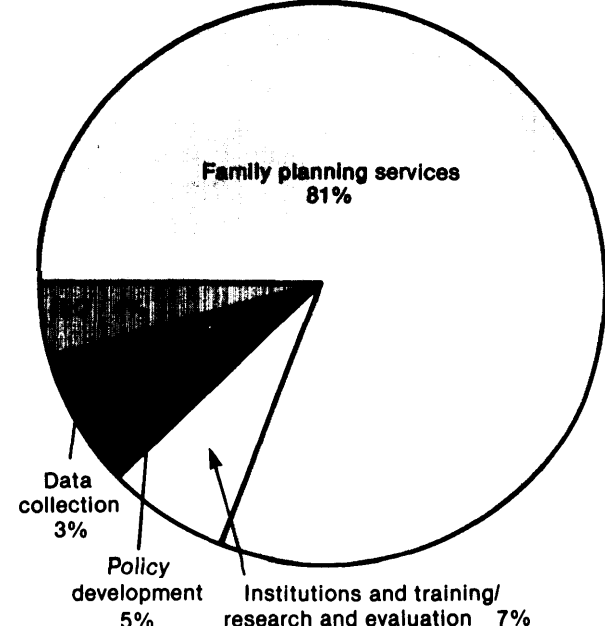
External population assistance trend data and per capita estimates for 1977-79 to the 13 most populous LDCs are shown in table 48 (for complete list of countries see table A-3, app. A, ch. 9). Thirty-nine percent of all external population assistance in 1979 went to these countries,

Figure 34.—Kinds of Population Assistance Provided to Latin America, 1979



SOURCE: Percentages derived from: *UNFPA Report on Population Assistance, 1979—Table 3—Assistance to Population Programs by Country and Region and Major Population Sector.*

Figure 35.—Kinds of Population Assistance Provided to Middle Eastern/Mediterranean Regions, 1979



SOURCE: Percentages derived from: *UNFPA Report on Population Assistance, 1979—Table 3—Assistance to Population Programs by Country and Region and Major Population Sector.*

Table 48.—Total International Population Assistance Flows to 13 Most Populous LDCs, 1977=79, (in millions of dollars)

Country	1977	1978	1979	Cents received per capita 1979
China	\$0.0	\$0.0	\$0.4	0+
India	19.5	35.6	36.5	5
Indonesia	42.4	23.8	24.2	16
Brazil	5.0	9.0	9.7	8
Bangladesh	18.0	20.7	43.8	49
Pakistan	4.2	2.3	3.1	4
Nigeria		1.4	1.9	2
Mexico	1.2	7.6	8.3	12
Vietnam	1.2	0.7	5.4	10
Philippines	4.3	19.0	14.5	28
Thailand	7.3	11.7	18.2	38
Turkey		1.5	2.1	5
Egypt		7.3	6.6	16

SOURCES: UNFPA Reports on Population Assistance, 1977, 1978, 1979-table 2. Per capita figures derived from medium variant population projections for 1979 from United Nations: *World Population Trends and Prospects by Country, 1950-2000: Summary of the 1978 Assessment*; New York, 1979.

which comprise 75 percent of the world's population. If China's population is excluded from the total count, the proportion becomes more equal: 39 percent of population assistance goes to 46 percent of the LDC population.

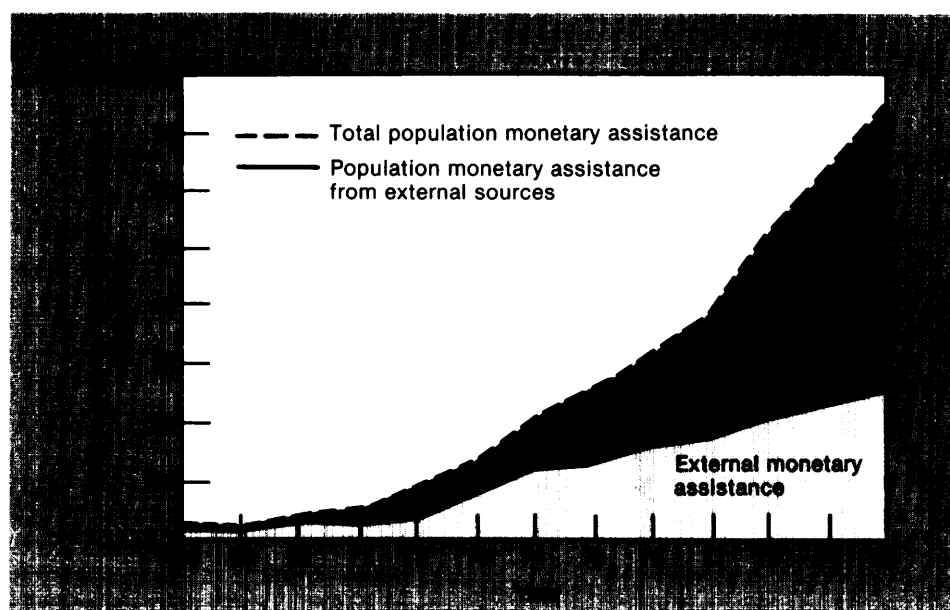
LDC support for population activities

Of the \$1.0 billion spent for population activities in 1979, LDCs contributed \$450 million. The LDC commitment is thus a crucial component of support for population programs.

Although data are not available for all countries, there is evidence that some LDCs assume funding and operational responsibilities in proportion to the length of time the program has been in operation. In Indonesia, trend data illustrate this growing government commitment as the family planning program has matured (see fig. 36). In 1968, 96 percent of Indonesia's total budget came from external assistance; by 1980, this share had fallen to 35 percent. Some of this current assistance is for raw materials for local production of contraceptives, as the government's goal is self-reliance in the production of orals by 1985-90.

Many populous LDCs are contributing more than 50 percent of the funds needed for their population programs. Table 49 shows 16 such countries for which data are available. Of the 13 most populous countries, China, Bangladesh, In-

Figure 36.—Trends in Monetary Population Support in Indonesia



SOURCE: AID's Role in Indonesian Family Planning; Program Evaluation Report No. 2, app. table 3. Compiled from AID estimates from various sources.

Table 49.—Degree of Support Provided by Selected LDCs for Population Activities/Number of Years Government and Private Agency Sponsored Services Available

Country	Local dollars for population activities (thousands)	As a percent of all population funding	Years family planning services available	
			Government	Private
Category 1: Countries providing more than 50 percent of all resources (1980)				
Bangladesh	\$22,000	54	21	28
India	175,000	79	29	32
Indonesia	49,700	65	13	24
Malaysia	8,000	78	14	23
Nepal	4,145	54	15	23
Philippines	23,500	69		16
South Korea	16,186	84	; :	20
Thailand	10,914	60	14	26
Costa Rica	2,496	58	13	15
El Salvador	4,030	62	13	18
Jamaica	1,366	56	14	24
Mexico	48,207	81	8	16
Panama	2,562	66	12	15
Mauritius	800	69	9	24
Senegal	2,428	77	—	—
Morocco	8,000	73	15	11
Category 11: Countries providing less than 50 percent of all resources (1980)				
Colombia	2,100	33	14	16
Dominican Republic	317	11	13	15
Honduras	410	11	15	20
Paraguay	96	13	8	15
Botswana	106	6	9	—
Ghana	1,235	43	11	
Kenya	2,000	16	14	; :
Swaziland	130	24	—	—
Tanzania	1,152	46	—	—
Egypt	11,283	38	15	28
Tunisia	1,000	10	15	13

—Data unavailable.

NOTE: Countries included in this table are those that have local family planning expenditure data available.

SOURCE: AID, *Memorandum on Cost Implications of Population Stabilization*, table 5; March 17, 1981 (for dollar figures). L. Corsa and D. Oakley, *Population Planning*; table 7.2, Initiation of National Family Planning Programs, pp. 217-219 (for length of family planning program data).

dia, Indonesia, the Philippines, Thailand, and Mexico contributed more than 50 percent to their population programs (data are unavailable for the other most populous countries). Nine of

twelve countries in which private family planning associations have provided services for 20 or more years are now more than 50 percent self-sufficient.

Impacts of population assistance

Population assistance has had diverse impacts. More people are now aware of the problems associated with rapid population growth. Government officials, scientists, and informed lay people from LDCs and MDCs are working together to develop new contraceptive methods. Many women of reproductive age in many LDCs have

at least heard of family planning even though some may not fully understand what it means or may not yet have convenient access to contraceptive methods. Laparoscopic surgical techniques incorporating use of plastic rings and clips for voluntary female sterilization (developed with population funds) make it possible for

paramedical personnel to carry out this procedure in many countries. More data of better quality are available to enable governments to formulate policy, set demographic goals, and monitor program effectiveness. Each of the three decennial census rounds from the 1960's through the present has been characterized by substantial improvements in data collection techniques and data processing and analysis capabilities in LDCS. The World Fertility Survey (WFS) and Contraceptive Prevalence Surveys are providing rich information on fertility trends and differentials, levels of contraceptive knowledge and use, and program evaluation data. Operations research projects are testing innovative approaches to the delivery of family planning information and methods. Social marketing programs have put contraceptives on the road to being self financing in some LDCs. Most importantly, mass media campaigns have made the topic of family planning and discussion of contraceptive methods public and acceptable. *Above all, fertility rates have begun to decline and are declining rapidly in countries with strong family planning programs.*

The awareness of rapid population growth as a problem is now worldwide. At the international Conference of Parliamentarians in Colombo, Sri Lanka, in 1979, delegates from 58 nations agreed that international population assistance from donor countries should be targeted to reach \$1.0 billion by 1984. The climate for discussion of population-related issues has changed dramatically in the past decade. The topic of the Second International Conference on Voluntary Sterilization held in Geneva in 1973 was so sensitive that WHO refused to participate. Much conference time was spent trying to develop a euphemism for the term "voluntary sterilization"; "surgical contraception" was the favored candidate. Although the specter of coercion arose during India's 1976 vasectomy campaign, changing attitudes were evident at the fourth such conference, held in Seoul in 1979, where more than 400 delegates from 75 countries shared information on voluntary sterilization techniques and delivery methods developed with population assistance funds.

Better data derived from the decennial censuses make determination of population growth rates, bases for economic forecasting, and analysis of population distribution changes much more reliable. UNFPA has taken a leading role in providing technical assistance to LDCS to improve the substance and quality of their collection and analysis of census data. These data in turn are supplemented and complemented with data derived from surveys on particular topics.

WFS, for example, has provided an extensive data base on fertility trends and factors influencing fertility in LDCS, and is making the first comparable data available from 50 LDCS. Early results from about 20 WFS countries indicate that:

1. *Levels of knowledge of contraception are high.* Over 90 percent of married women in many countries and at least 75 percent in most other countries know at least one method of contraception. In a few countries where family planning programs have only recently been implemented, 25 to 33 percent know at least one method.
2. *There is a large unsatisfied demand for family planning.* Among women who say they want no more children, about half are not currently using contraception. This proportion reaches 90 percent on the Indian subcontinent, where contraceptive practice is low. As contraceptive use increases, desired family size decreases, because when women realize they can avoid unwanted pregnancies, they are likely to change their perceptions of ideal family size.
3. *A major reason why women who want no more children aren't using contraception is that contraceptives are not always accessible.* Women cite a number of reasons for not using contraception, including fear of side effects, opposition of husband, or weak motivation. Recent analyses, however, have indicated that contraceptive use in some LDCS would increase markedly with the addition of more family planning outlets, a wider choice of methods, and a reduction in traveling time to these outlets.

4. *Women acknowledge that they have more children than they want.* In 12 of the 15 countries where women were asked whether their most recent birth was wanted or unwanted, more than 30 percent said the birth was unwanted.
5. *Rural and uneducated women do practice contraception.* More than 40 percent of rural currently married women aged 35 to 39 have used contraception in 13 of the 20 countries for which data are available. Levels of use are generally lower among rural and uneducated women but these differences are reduced if contraceptives are available at the village level at low cost.

These analyses and others nearing completion provide information previously unavailable to scientists and government officials in LDCs, and have documented trends that many scientists only suspected. These surveys have also left a legacy of trained people in LDCs who are now better able to carry out demographic research.

Funding for the surveys has been cooperative. The largest portions have been contributed by AID and UNFPA, but Great Britain's Overseas Development Ministry (ODM) has also contributed, and LDCs, on average, bear about one-third of the in-country survey costs.



Photo credit: World Bank

Home visits by field workers provide health and family planning information in rural Kenya

The International Fertility Research Program (IFRP) funded primarily by AID and UNFPA has, since 1971, conducted clinical trials of new fertility planning methods in 200 centers in some 50 countries, primarily in Latin America and Asia. IFRP has also established national fertility research programs that now have the capability to conduct their own research in Bangladesh, Colombia, India, Indonesia, Sri Lanka, and the Sudan. This program is continuing its training function and testing postpartum N.JDs, techniques for nonsurgical sterilization, and barrier methods and conducting comparative trials on side effects of different oral contraceptives.

The Johns Hopkins Program for International Education in Gynecology and Obstetrics (JHPIEGO) has, since 1973, trained physicians from 70 LDCs in maternal and infant care, infertility, high-risk pregnancy, and voluntary sterilization. Followup studies indicate that each participant in this program has trained an average of 12 to 14 other LDC physicians upon return to his or her country.

The impacts of population assistance can be measured both in terms of successful projects such as these that cover many countries, and in terms of successes in individual countries where a number of projects and often multiple donors have participated in national efforts.

Indonesia's success story has become a model for other population efforts in Asia (see app. B). Begun in earnest in 1968 with the establishment of the National Family Planning Board, the country uses Village Contraceptive Distribution Centers and the help of local volunteers to recruit and supply family planning users. There are now 25,000 village distribution centers in Indonesia—one for each village on the main islands of Java and Bali. In 5 years, average completed family size dropped by one-third in Bali and one-fifth in Java. In parts of Bali, about 75 percent of married women are using contraceptives—a rate that approaches those of China and MDCs. This downturn in fertility rates is especially significant because Indonesia is characterized by a relatively low level of socioeconomic development that is often associated with low success in family planning program efforts: per capita income is only \$180 per year, infant mor-

tality rates are nearly 150 per 1,000 live births, and literacy among adult females is only 50 percent. AID has been the major donor, with contributions from the World Bank and UNFPA.

Mexico's national family planning program, announced in 1972, became fully operational in 1974. Between 1976 and 1978, total fertility rates fell from 6.15 to 5.18—a reduction of one child per woman. Between 1973 and 1978, contraceptive use increased from 13 to 42 percent of all married women. Assistance has been provided primarily through private and international organizations.

Thailand has been highly innovative in its family planning program and is moving rapidly toward self-sufficiency. It was the first LDC to experiment with innovative ways to distribute oral contraceptives in rural villages. Forty-seven percent of the fertility decline from 1968 to 1975 has been attributed to organized family planning programs (19). Contraceptive use increased from 33 to 53 percent between 1975 and 1978. A major component of this increase has been the number of women electing voluntary sterilization. The Thai program has received external assistance from AID and UNFPA.

Do family planning programs make a difference or would fertility rates fall anyway? Demographers Mauldin and Berelson showed that in LDCs with strong family planning programs, fertility declined an average of 30 percent between 1965 and 1975 (some declines were as high as 50 percent)(n). This is in contrast to declines of 15 to 30 percent in LDCs with moderate programs and 1 to 8 percent in those with weak or nonexistent programs. There is synergism between effective programs and the level of development of a country, but, on balance, family planning programs have a significant impact over and above the country's development level (for details, see ch. 7).

In some countries, population assistance has been available and programs have been in operation for a number of years but fertility has not declined appreciably; Pakistan and Kenya are examples. Renewed efforts are now under way to solve persistent problems of infrastructure and give women opportunities beyond child-bearing.

Is assistance for family planning cost effective relative to other interventions to reduce population growth rates? Factors such as increased female education, reductions in infant mortality, and rises in per capita incomes for the poor are linked to fertility decline. These interventions are highly justified in both humane and economic terms. Nevertheless, LDC government economists and planners faced with tight budgets must choose those interventions that are both humane and cost effective. A combined governmental effort to modify fertility by providing family planning services and raising women's educational levels has multiple potential benefits: fertility is likely to decline because services are available, educated women are likely to have fewer children, and smaller family sizes mean smaller numbers of children who will need to be educated in the future. But an effort to modify fertility levels solely by raising women's educational levels, although the education of women is unquestionably an urgent need in LDCs, is likely to be extremely costly. Simmons (20) estimates that such an educational program would be seven times more costly than an effort focused primarily on the provision of family planning services. The relative costs of other single interventions to modify fertility, each of which, aside from its impact on fertility, stands as a critical need in LDCs, vary widely. Intervening to modify infant mortality in this context is estimated to cost up to 36 times more than a family planning effort; the cost of intervening to raise per capita income is estimated to be 138 times greater.

Future needs

Five major parameters define the future needs and priorities of U.S. population assistance to LDCS:

1. the types of assistance appropriate to various countries in light of their national policies and priorities, and the needs of their particular population programs;
2. the number of couples of reproductive age in LDCS now and in 2000;
3. the estimated costs of population programs that include provision of family planning services and supplies for an increasing percentage for these couples;
4. the countries or regions where population growth will be concentrated in the next two decades; and
5. political and other considerations governing the distribution of U.S. population assistance.

Types of assistance appropriate to various countries and regions

Some LDCS are at relatively advanced stages of population program development, while others have taken only preliminary steps toward organized programs. These wide variations in program development are likely to persist during the next two decades. Countries at early stages are more likely to emphasize policy development, IEC efforts, legal changes that affect women's status, infrastructure development, training, and clinic construction. These actions tend to be expensive, and are unlikely to result in early, measurable changes in fertility and contraceptive use rates. Although population support in countries with longstanding population programs is likely to be more cost effective because infrastructures are more highly developed, diverse, well-run service delivery

systems are in place, and a wide range of contraceptive methods has been made available, comprehensive estimates of program costs cannot be made. Some generalizations, however, can be made by region:

The number of Asian couples who will need family planning services is immense, but almost all governments in this region have recognized the problem and initiated family planning programs, often with specific demographic targets. Until satisfactory local manufacturing arrangements can be made, contraceptive supplies—orals, IUDs, condoms, and spermicides—will be a major cost, requiring foreign exchange. U.S. assistance to meet commodity needs generally involves U.S. procurement, which has constituted a large portion of U.S. assistance to Asia. Asian countries also need support for primary health infrastructures, and for technical assistance in trying new approaches to minimize per capita expenditures. In Asia, where programs are well under way, U.S. emphasis on management training and cost-effectiveness studies could be particularly useful.

In Africa, by contrast, present populations are neither as large nor as dense as those in Asia, and partly for those reasons, governments have not yet initiated extensive population/family planning programs. Assistance in health and communications infrastructure and in demographic data collection to highlight the implications of rapid population growth is the most obvious need. As with any new programs, per capita start-up costs will be high in terms of family planning users, and the socioeconomic setting will make all programs more costly, less efficient, and initially heavily reliant on external assistance. Expanded support for the work of existing private organizations is an important need.

In the Middle East and Mediterranean region, cultural constraints that affect the status of women are a greater deterrent to contraceptive use than lack of infrastructure or funds. Private agencies can play a major role in raising such issues. Where government programs exist, a major problem is reaching and counseling women on the benefits of family planning.

In Latin America, there is wide acceptance of family planning by women, but millions still lack the family planning services they desire. Greater public and private sector commitment and support are needed for family planning efforts. Despite rising demand for family planning services, some governments have been reluctant to offer family planning services and sometimes limit access to sterilization to those with large families or immediate health risks. In those countries, the most appropriate U.S. assistance is probably through the private voluntary groups and medical practitioners who have often been leaders in increasing public and official awareness of the benefits of family planning to health and development efforts.

Overall, types and levels of U.S. assistance should be in response to national efforts and needs. Where national governments are not ready to commit their own resources to population and family planning efforts, massive external assistance can become a target for political attack. Funds provided to private agencies help to encourage greater local interest and commitment, while funds channeled through professional assistance agencies and universities help to evaluate program effectiveness and to develop innovative service delivery efforts. In determining priorities for population assistance, U.S. policy makers need to weigh different regional needs and the costs of various types of assistance.

The number of couples of reproductive age in LDCs

The number of couples in LDCs who will be in their reproductive years—in which the wife's age is between 15 and 49—for the next two decades can be calculated because all but the youngest members of this group have already

been born. Excluding China (its unique population status and projections are discussed in app. A), and assuming that about 70 percent of women are in some form of stable union, there are now 374 million such women living in LDCs. If these couples were to have an average total completed fertility rate of 2.2 children per couple (or replacement fertility), about 80 percent (300 million) would now need to be practicing contraception. (This 300 million allows for 10 percent who are naturally sterile and another 10 percent who are pregnant or lactating (see table 50).)

Table 50.—Basis for Estimates of Population Support Costs in 1980 and 2000

Target population	(In millions)
(1) Total LDC population (excluding China) In 1980 (medium variant)	2,310
(2) Number of LDC women 15-49	534
(3) Number of LDC women 15-49 in union (MWRA) ^a	374
(4) Number of LDC women who are fecund, ages 15-49 in union	337
(5) Number of LDC women not pregnant or breastfeeding who are fecund, ages 15-49 in union	303
(6) Number of LDC women using contraception needed to achieve replacement fertility level (80 percent of all MWRA)	300
(7) Number of MWRA needing contraception in 2000	495
Minimum per user costs ^b	(In dollars)
Contraceptive retail sales and community based services alone.	\$ 6
With clinic services and medical backup	10
With other population program components	15
With infrastructure building and training necessary for new program	50-100
Using the conservative estimate of \$15 per user costs:	
1980 \$15 x 300 million = \$4.5 billion	
2000 \$15 x 495 million = \$7.4 billion ^c	

^a Married women of reproductive age.

^b China Expenditures are included in app. A.

^c In 1980 constant dollars.

(3) Assumes 70 percent of women 15-49 in union.

(4) Assumes 10 percent MWRA naturally sterile.

(5) Assumes 10 percent MWRA lactating or pregnant.

(8) Replacement fertility is when crude birth rate equals crude death rate.

(7) Assumes a 65 percent increase (medium variant) in number of women needing contraception in 2000.

SOURCES: AID, "Cost Implications of Population Stabilization," March 1981; Population Reference Bureau, 1980; U.N. Medium Variant Projections from World Population Trends and Prospects by Country, 1950-2000; U.S. Census Bureau, Illustrative Projections of World Population to 21st Century.

Projected population growth in the next two decades will increase contraceptive needs by 65 percent. But with the exception of China, where contraceptive use rates are high, only about 20 percent of LDC couples are contracepting. There would thus have to be a fourfold increase in current contraceptive use for fertility to begin to fall to replacement levels. By 2000, some 495 million couples of reproductive age are likely to need contraceptive protection if population growth is to approach stabilization (see table 50). (If China's estimated reproductive-age population is added to this calculation, this number rises to 695 couples by 2000.)

Two key factors will affect the future of these LDC couples. First, a high proportion of all couples of reproductive age will be young—between 15 and 29 rather than 30 or older—because of the “baby boom” generation in LDCS that followed World War II. Their family planning needs will thus center around child-spacing.

Second, because of this high proportion of younger men and women, age at marriage may have an important effect on fertility that cannot yet be precisely assessed. If this generation defers marriage and/or childbearing for several years, say from age 17 to age 20, as is now happening in some Asian countries, fertility decline can be accelerated beyond that expected from higher rates of contraceptive use.

Estimated costs of providing family planning services and supplies

Although the number of couples of reproductive age can be estimated, the costs of providing services and supplies for these couples are more difficult to predict. Any assessment of costs will be modified by changing international and national political and economic considerations.

Although population assistance to China from UNFPA has just begun, China may request more aid in the future because of the magnitude of its population growth.

Current per-user costs in LDCS (excluding China) range from \$6 to \$100 annually, depend-

ing on the type and efficiency of the population program, on average, these costs are about \$15 per user (see table SO). (This cost includes all program aspects, from demographic data collection and analysis to IEC, administrative support, and commodity procurements, and is thus a conservative estimate for an efficiently run program.) Using this estimate, today's cost to achieve replacement fertility, with 80 percent of couples using contraception, would be some \$4.5 billion annually.

Although rates of contraceptive prevalence are unlikely to exceed 80 percent by 2000, if these rates were to rise to 80 percent, program costs could reach \$7.4 billion in 1980 constant dollars. (This amount rises to \$10.7 billion when China's childbearing-age population is added.) If inflation persists at about 10 percent per year, the dollar would be worth about one-eighth of its 1980 value, and the increase would be twelvefold.

Although \$15 per user is a conservative estimate, if a program is efficiently run and has a good mix of methods (heavy reliance on voluntary sterilization, and sliding scales of payment by users), this figure is fairly realistic. In many regions such as Africa and the Middle East, where programs are just beginning, these costs will be much higher.

The 1982 AID budget request for U.S. population assistance was \$253.4 million. Under this request, UNFPA and AID had projected shortfalls—shortages of funding for requested new projects in LDCS and for support of continuing projects—of \$40 million to \$100 million and about \$200 million respectively. (For the UNFPA budget request this shortfall assumed that other MDCS would increase their contributions by 10 percent rather than 15 percent as in the past. See footnote ch. 1.)

Shortfalls under the actual budget of \$21 million for 1982 and the projected budget of \$230 million for 1983 will increase substantially as inflationary effects continue and needs for assistance rise during the 2-year period.

The countries in which population growth will be greatest in the next two decades

Priorities for assistance for the remainder of this century might center on the 13 countries that together now account for 75 percent of the LDC population and will account for the greater proportion of numbers added in the next 20 years—India, China, Indonesia, Brazil, Bangladesh, Pakistan, Nigeria, Mexico, Vietnam, Philippines, Thailand, Turkey, and Egypt (listed in order of their projected population increases).

For political and economic reasons, bilateral population assistance from the United States will not be sent to some of these countries, will be provided only minimally to others, and will focus heavily on a few. Multilateral agencies are likely to continue to address the unmet needs of certain of these countries. For example, because the Foreign Assistance Act currently prohibits assistance to Communist countries, China and Vietnam receive no direct U.S. assistance. Countries like Brazil and Mexico, which prefer not to receive direct assistance from the U.S. Government, look to UNFPA, IPPF, and other intermediaries to provide external assistance. Indonesia, Bangladesh, the Philippines, Egypt, and Thailand, on the other hand, welcome U.S. population assistance and have received substantial aid, both direct and indirect.

Growing U.S. interest in African issues and requests from African countries may also prompt increased population assistance to Nigeria, Kenya, Senegal, Burundi, Rwanda, and other nations of the region. Overall, the countries that receive the largest amounts of U.S. population assistance are not always determined on the basis of demographic priorities but rather by other interests and mutually cooperative relationships. The obvious importance of helping such nations as China, India, Brazil, and Mexico argues for a continuing multiplicity of donors and adequate funding for multilateral assistance programs of UNFPA, the World Bank, and IPPF.

Political and other considerations governing the distribution of U.S. population assistance

In the long run, levels of U.S. population assistance, like other forms of U.S. development aid, will be determined by an overall assessment of the importance of population growth to U.S. interests. The Middle East provides an important example. Because high levels of Security Supporting Assistance have been appropriated for Middle Eastern countries, population assistance to Egypt is a major effort, well-justified by Egyptian national needs but also by U.S. security interests. Population assistance for Egypt can be expected to increase in recognition of the crucial role of the “Arc of Crisis” countries of that region.

The situation in Latin America is quite different. Increasing migration to the United States from Mexico and the Caribbean is alerting U.S. citizens to the high rates of population growth of many Western Hemisphere countries. Even where the United States does not provide direct population assistance, the United States has a strong interest in encouraging multilateral or NGO assistance and expanded programs. Over the long run, lower population growth rates in Latin America and the Caribbean would be expected to reduce pressures for migration and to ease social and economic conflicts within and among countries.

The United States is likely to maintain strong political and humanitarian ties to Asian nations, three of which—China, India, and Indonesia—are projected to contribute almost 37 percent of world population growth to 2000. The government of India, which is expected to experience the world’s largest population increase in the next two decades (346 million as compared to the projected U.S. increase of 38 million) has given high priority to slowing its population growth.

Africa poses a special problem with respect to levels of population assistance. While U.S. in-

terest and concern over African development are increasing, the scope for population assistance is partly limited to demographic and census work, and informing African officials of the consequences of rapid population growth rates. There is an immediate need for increasing the number of qualified technical personnel to identify Africa's population issues and encourage consideration of these issues by policy makers.

Future funding needs for population programs will depend on both political and demographic factors. The total need is vast, but in de-

termining which components and how much of this need should be met by the U.S. Government—either directly or indirectly—regional, programmatic, and economic considerations weigh heavily. There is a continuing role for private agencies, for U.S. government-to-government (bilateral) programs, and for multilateral agencies. This mix of different channels, which suits the mix of different national and regional needs and preferences, deserves regular review and evaluation.

Chapter 9 references

1. Agency for International Development, "AID Population Task Force Report to IDCA," June 1980.
2. ——— "Congressional Presentation for FY 80," Washington, D. C., 1980.
3. ——— *Table 400—Population Program Assistance by Major Organizations: Funding Allocations FY 65-80, December 1979.*
4. ——— *Table 500—Primary Sources of Grant Funds for International Population Assistance, 1979.*
5. Berelson, B., "Prospects and Programs for Fertility Reduction: What? Where?" *Population and Development Review*, vol. 4, No. 4, December 1978.
6. Corsa, L., and Oakley, D., *Population Planning* (Ann Arbor, Mich.: University of Michigan Press, 1979).
7. Hemmer, C., Special Assistant for International Organizations, Office of Population, AID, Washington, D. C., personal communication, 1981.
8. Heiby, J., Ness, G., Pillsbury, B., "AID's Role in Indonesian Family Planning: A Case Study With General Lessons for Foreign Assistance," December 1979.
9. International Planned Parenthood Federation, *Report to Donors* (London: IPPF, 1979).
10. Lubell, I., Director, Association for Voluntary Sterilization, personal communication on Association for Voluntary Sterilization expenditures for calendar year 1979.
11. Mauldin, P., Berelson, B., Sykes, Z., "Conditions of Fertility Decline in Developing Countries, 1965-1975," *Studies in Family Planning*, vol. 9, No. 5, May 1978.
12. Nortman D., and Hofstatter, E., *Population and Family Planning Programs: A Compendium of Data Through 1978, 10th edition* (New York: Population Council, 1980).
13. O'Connor, M., Chief, Program Planning and Statistics Branch, UNFPA, personal communication, 1981.
14. Organization of Economic Cooperation and Development, *Development Cooperation: 1980 Review* (Paris: OECD, 1980).
15. Pathfinder Fund, *Annual Report* (Chestnut Hill, Mass.: 1979).
16. Piotrow, P. T., "World Population Crisis," *Praeger Special Studies in International Economics and Development* (New York: Praeger Publishers, 1973).
17. ——— "World Population: The Present and Future Crisis," *Headline Series 251* (New York: Foreign Policy Association, October 1980).
18. Salas, R. M., *International Population Assistance: The First Decade* (Oxford: Pergamon Press, 1979).
19. Siew-Ean Khoo, "Measuring the Thai Family Planning Program's Impact on Fertility Rates: A Comparison of Computer Models," *Studies in Family Planning*, vol. 10, No. 4, April 1979.
20. Simmons, G. B., "Family Planning Programs or Development: How Persuasive is the New Wisdom?" *International Family Planning Perspectives*, vol. 5, No. 3, September 1979.
21. Speidel, J., Deputy Director, Office of Population, AID, Washington, D. C., "(Cost Implications of Population Stabilization," draft memorandum, March 1981.
22. ——— personal communication, 1981.
23. United Nations, *Demographic Yearbooks*, 1952, 1957. New York.

24. _____ "World Population Trends and Prospects by Country, 1950-2000: Summary Report of the 1978 Assessment," New York, 1979.
25. U.N. Fund for Population Activities, *Fact Sheets* (New York: UNFPA, 1980).
26. _____ "Reports on Population Assistance—1977, 1978, 1979," *Table 1—Population Assistance by Major Donors 1971-1979; Table 2—Assistance to Population Programs by Country and Region by Major Donors; Table 3—Assistance to Population Programs by Country and Region and Major Population Sector*.
27. _____ "Report of the International Conference of Parliamentarians on Population and Development" (New York: UNFPA, 1979).
28. U.S. Census Bureau, "Illustrative Projections of World Populations to the 21st Century," *Special Studies Series P-23, No. 79, January 1979*.
29. Weintraub, D., Director, Family Planning International Assistance, personal communication on Family Planning International Assistance expenditures for calendar year 1979.
30. World Bank, *Annual Report* (Washington, D. C.: World Bank, 1980).
31. _____ *World Development Report* (Washington, D. C.: World Bank, 1980).
32. World Fertility Survey, *Country Reports* (various years).

Table A-I.—Regional Distribution of All External Population Assistance

(In millions of U.S. dollars, not including regional, interregional, or global funding)						
Region (country specific)	1977	Percent	1978	Percent	1979	Percent
Asia.....	\$117.3	56%	\$128.1	55%	\$168.3	60%
Africa.....	30.6	15	32.5	14	32.2	12
Latin America.....	45.9	22	50.2	22	55.7	20
Middle East.....	14.4	7	20.8	9	23.4	8
Total.....	\$208.2	100%	\$231.6	100%	\$279.6	100%

SOURCE: Office of Technology Assessment.

Table A.2.—Kinds of Population Assistance by Region, 1979

(in millions of U.S. dollars, not including regional, interregional, or global funding)					
	1979	Percent		1979	Percent
Africa			Latin America		
Family planning services.....	\$22.2	58%	Family planning services.....	\$55.5	81% ^{Yo}
Data collection.....	7.1	18	Data collection.....	2.3	3
Information, education, and communication.....	2.3	6	Information, education, and communication.....	2.5	4
Policy development.....	1.8	5	Policy development.....	3.2	5
Institutions and training/research and evaluation.....	4.9	13	Institutions and training/research and evaluation.....	4.9	7
Total.....	\$38.3	100%	Total.....	\$68.4	100 %/0
Asia			Middle East		
Family planning services.....	\$152.9	85%	Family planning services.....	\$17.0	650/o
Data collection.....	4.4	2	Data collection.....	3.3	12
Information, education, and communication.....	4.2	2	Information, education, and communication.....	1.1	4
Policy development.....	5.6	4	Policy development.....	.3	1
Institutions and training/research and evaluation.....	12.3	7	Institutions and training/research and evaluation.....	4.9	18
Total.....	\$179.4	100% ¹⁰	Total.....	\$26.6	100% YO

SOURCE: Office of Technology Assessment.

**Table A-3.—Total International Assistance Flows to
50 Most Populous LDCs, 1977.79, per Capita Dollar,
1979**

(in millions of U.S. dollars)				
	1977	1978	1979	Per capita aid/dollars
China	0	0+	\$0.4	\$0.00 +
India.	\$19.5	\$35.6	36.5	.05
Indonesia.	42.4	23.8	24.2	.16
Brazil	5.0	9.0	9.7	.08
Bangladesh	18.0	20.7	43.8	.49
Pakistan.	4.2	2.3	3.1	.04
Nigeria.	1.4	1.4	1.9	.02
Mexico.	5.3	7.6	8.3	.12
Vietnam	1.2	0.7	5.4	.10
Philippines	4.3	19.0	14.5	.28
Thailand.	7.3	11.7	18.2	.38
Turkey	1.2	1.5	2.1	.05
Egypt	2.2	7.3	6.6	.16
Iran.	1.1	1.9	0.1	.00 +
South Korea.	5.4	3.1	8.1	.46
Burma	0.1	0.1	0.1	.00 +
Ethiopia.	0.4	0.4	0.4	.01
South Africa.	—	—	—	—
Zaire.	0.7	0.4	1.0	.04
Colombia.	7.7	7.6	11.2	.43
Argentina.	0.2	0.4	0.6	.02
Afghanistan	1.2	1.6	2.5	.12
Morocco	2.5	2.4	2.4	.12
Algeria.	1.6	0.5	0.3	.02
Sudan.	1.3	0.6	0.3	.02
Tanzania	5.8	3.2	2.4	.14
North Korea.	—	—	—	—
Peru	0.8	1.6	2.0	.12
Kenya.	7.5	11.9	7.5	.47
Venezuela	0.1	0.5	0.2	.01
Sri Lanka.	3.8	2.5	2.7	.18
Nepal	5.2	2.2	3.4	.24
Malaysia	1.7	2.6	2.9	.22
Uganda	0.5	0.6	0.6	.05
Iraq.	0.1	0.2	0.2	.02
Ghana	2.4	1.9	2.5	.22
Chile.	1.7	1.8	1.6	.15
Mozambique.	0.3	—	1.1	.11
Cuba.	1.3	1.0	1.1	.11
Kampuchea.	—	—	—	—
Madagascar.	0.2	0.4	0.5	.06
Syria.	0.6	1.1	0.8	.10
Cameroon	0.1	0.3	0.4	.05
Saudi Arabia.	0.0+	—	—	—
Ecuador.	0.8	0.8	1.6	.21
Ivory Coast.	0.0+	0.4	0.5	.06
Zimbabwe	—	—	0.0 +	—
Guatemala.	1.2	0.8	1.0	.14
Angola.	—	—	—	—
Upper Volta.	0.1	0.1	0.1	.01

NOTE: Per capita dollars aid reflect 1979 U.N. medium variant population.

Table A-4.—Population Dynamics of 50 Most Populous LDCs and Selected MDCs and Regions

Country	Population, in millions		Rate of natural increase, 1981	Years to double population, 1981
	1981	2000		
China.....	969	1,190	0.80/0	59
India.....	710	1,040	2.1	33
Indonesia.....	155	221	2.0	35
Brazil.....	130	212	2.4	29
Bangladesh.....	91	153	2.6	27
Pakistan.....	85	145	2.8	25
Nigeria.....	80	149	3.2	22
Mexico.....	72	132	2.5	28
Vietnam.....	54	79	2.8	25
Philippines.....	53	83	2.4	29
Thailand.....	49	76	2.0	35
Turkey.....	46	69	2.2	32
Egypt.....	43	65	3.0	32
Iran.....	39	65	3.0	23
South Korea.....	39	51	1.7	41
Burma.....	36	55	2.4	29
Ethiopia.....	33	55	2.5	28
S. Africa.....	30	48	2.4	29
Zaire.....	29	46	2.8	25
Colombia.....	28	42	2.3	33
Argentina.....	27	33	1.6	43
Afghanistan.....	23	37	2.7	26
Morocco.....	21	36	3.0	23
Algeria.....	19	36	3.2	22
Sudan.....	19	31	3.1	22
Tanzania.....	18	34	3.0	23
North Korea.....	18	27	2.4	28
Peru.....	18	29	2.7	26
Kenya.....	17	34	3.9	18
Venezuela.....	15	26	3.0	23
Sri Lanka.....	15	20	2.2	32
Nepal.....	15	22	2.4	29
Malaysia.....	14	20	2.3	30
Uganda.....	14	25	3.0	23
Iraq.....	13	24	3.4	20
Ghana.....	12	21	3.1	22
Chile.....	11	15	1.5	47
Mozambique.....	11	18	2.6	27
Cuba.....	10	13	0.9	77
Kampuchea.....	9	13	1.8	38
Madagascar.....	9	15	2.6	27
Syria.....	9	16	3.4	21
Cameroon.....	9	13	2.3	30
Saudi Arabia.....	9	16	3.0	23
Ecuador.....	8	15	3.1	22
Ivory Coast.....	8	14	3.1	22
Zimbabwe.....	8	14	3.4	21
Guatemala.....	7	13	3.1	22
Angola.....	7	12	2.4	28
Upper Volta.....	7	12	2.6	27
Sweden.....	8	8	0.1	1,155
United Kingdom.....	56	57	0.1	693
France.....	54	57	0.4	178
West Germany.....	61	59	-0.2	—
Japan.....	117	129	0.8	82
United States.....	224	260	0.7	95
Africa.....	483	828	2.9	24
Latin America.....	378	608	2.3	30
East Asia ^a	1,149	1,406	1.2	58
South Asia ^b	1,457	2,205	2.3	30
Europe.....	485	520	0.4	178
Oceania.....	23	30	1.3	54
U.S.S.R.....	269	312	0.8	86
All LDCs ^c	3,357	4,926	2.1	34
All MDCs ^d	1,138	1,272	0.6	113
World.....	4,495	6,199	1.7%	41

^aEast Asia includes China, Japan, Hong Kong, North and South Korea, Macao, Mongolia, and Taiwan.

^bSouth Asia includes the rest of Asia including Middle Eastern Arab countries.

^cLess developed countries (LDCs) include all regions of Africa, Latin America, China, East Asia, Southern East Asia, Middle South Asia, Western South Asia, Melanesia, Micronesia, and Polynesia.

^dMore developed countries (MDCs) include Northern America, Japan, Europe, Australia, New Zealand, and U.S.S.R.

SOURCES: Population figures from, U.N. 1979-World Population Trends and Prospects by Country, 1950-2000: Summary Report of the 1978 Assessment. Rate of natural increase and doubling time figures from Population Reference Bureau, 1981 World Population Data Sheet.

Table A-5.—Socioeconomic and Quality of Life Indicators for TOP 50 LDCS and Selected MDCS

Country	1971 GNP per capita (U.S. dollars)	1975 adult literacy rate (percent)	1981 life expectancy (years)	1981 infant mortality y ^a
China	\$230	NA	68	56
India	180	36	52	134
Indonesia	360	62	50	91
Brazil	1,570	76	64	84
Bangladesh	90	26	47	139
Pakistan	230	21	52	142
Nigeria	560	NA	48	157
Mexico	1,290	76	65	70
Vietnam	170	87	62	115
Philippines	510	87	61	65
Thailand	490	84	61	68
Turkey	1,210	60	61	125
Egypt	400	44	55	90
Iran	2,160 ^b	50	58	112
South Korea	1,160	93	66	37
Burma	150	67	53	140
Ethiopia	120	10	39	178
S. Africa	1,480	NA	60	97
Zaire	210	15	46	171
Colombia	850	81	62	77
Argentina	1,910	94	69	41
Afghanistan	240	12	42	185
Morocco	670	28	55	133
Algeria	1,260	37	56	127
Sudan	320	20	46	141
Tanzania	230	66 ^b	50	125
North Korea	730	NA	62	70
Peru	740	72	56	92
Kenya	330	40 ^b	53	83
Venezuela	2,910	82 ^b	66	45
Sri Lanka	190	78 ^b	64	42
Nepal	120	19	43	133
Malaysia	1,090	60 ^b	61	44
Uganda	280	NA	52	120
Iraq	1,860	NA	55	92
Ghana	390	30	48	115
Chile	1,410	88	67	38
Mozambique	140	NA	46	148
Cuba	810	96 ^b	72	19
Kampuchea	NA	NA	45	150
Madagascar	250	50 ^b	46	102
Syria	930	53	62	81
Cameroon	460	NA	44	157
Saudi Arabia	7,690	NA	48	118
Ecuador	880	74	60	70
Ivory Coast	840	20	46	138
Zimbabwe	480	NA	53	129
Guatemala	910	47	58	69
Angola	300	NA	41	192
Upper Volta	160	5	42	182
United States	9,590	99	74	13
Japan	7,280	99	76	8
United Kingdom	5,030	99	73	13
France	8,260	99	73	10

^aAnnual number of deaths to infants under 1 year of age per 1000 live births.^bRefers to a year other than 1975 for literacy rates.

NA - Not available

SOURCES: World Bank, World Development Report 1980, p. 110, Basic Indicators (for GNP and literacy rates), Population Reference Bureau, World Population Data Sheet, April 1981 (for "life expectancy" and "infant mortality" rates).

**Table A-6.—Population Trends in Selected Countries
Involving U.S. Security Interests**

Country	1981 population (millions)	1981 rate of natural increase	Years to double population
Bangladesh.	91.4	2.60/o	27
Bolivia	5.7	2.5	28
Brazil	130.0	2.4	29
Central America. . . .	95.9	2.7	26
Egypt	43.1	3.0	23
India.	709.8	2.1	33
Indonesia	155.4	2.0	35
Kenya.	17.0	3.9	18
South Korea.	38.6	1.7	41
Mexico.	72.4	2.5	28
Morocco	21.0	3.0	23
Nigeria.	79.7	3.2	22
Pakistan	85.1	2.8	24
Philippines	52.5	2.4	29
Somalia.	3.8	2.8	25
Thailand	49.0	2.0	35
Turkey	46.5	2.2	32
Venezuela	15.4	3.0	23
Zimbabwe	7.7	3.4%	21