



INSPECTION REPORT

AID OFFICE OF POPULATION:
STRATEGIES AND CONCEPTS RELATING
TO POPULATION GROWTH

OCTOBER 31, 1975

Office of the
Inspector General of Foreign Assistance



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AID Office of Population:
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to Population Growth

SUMMARY

Pursuant to our authority under Section 624(d) of the Foreign Assistance Act of 1961, as amended, (FAA), IGA is conducting a series of inspections of population and family planning (P/FP) programs funded under Title X of the FAA. These inspections include overall planning, program management and evaluation activities of AID administration, as well as an assessment of management and operations of these programs in selected countries.

Our initial report, "AID Monitoring of the Bilateral Population and Family Planning Program" was issued on August 21, 1975. In that report we pointed out that the AID Bureau for Population and Humanitarian Assistance (PHA), created in February 1972, had no systematic procedure to assure that the AID country Missions' evaluations of the bilateral programs take place, that the evaluations address operational concerns, and that the findings are used at the Washington level to improve project design, assure efficiency and effectiveness, and contribute to the accomplishment of U.S. objectives. AID agreed with our recommendations that PHA develop and implement procedures to assure that Mission evaluation schedules are established, that the evaluations take place and that the Missions discharge their responsibilities for objective evaluations.

We have recently completed an on-site inspection in Indonesia and plan to conduct similar reviews in other countries. Individual country inspection reports will be issued.

In addition, we have secured data on the complete financial input and indicators of program results in each country over the past ten years, not only by AID but by all organizations receiving Title X support, other donors and the host government itself. These data are being analyzed to measure overall program operations, cost-effectiveness and which countries represent the most effective allocation of program resources for reducing world population growth. Our report dealing with these data will be issued shortly.

In conjunction with our overall undertaking in the population and family planning area, we submitted 34 questions (Appendix A) to the AID Office of Population (PHA/POP) concerning strategies and concepts in the application of Title X funds in the interregional population assistance programs. This information was considered essential for us to gain a greater understanding of these complex programs and to select those areas in need of special emphasis. Because the responses to these questions contain a comprehensive insight with respect to strategies and concepts, they are presented verbatim as Appendix B for informational purposes. This information should provide the recipients of this report with an appreciation of the magnitude and complexities involved in administering this program. During the course of our ongoing inspections we intend to test, where appropriate, the validity of the responses.

Appendix B presents PHA/POP's description of specific activities in the field of population and family planning assistance as provided under six major goals or categories of program emphasis:

1. Improvement of demographic data and analysis of population dynamics.
2. Population policy development and research on determinants of fertility behavior.
3. Research toward development and utilization of new and improved means of fertility control.
4. Support for family planning service delivery systems and provision of contraceptives.
5. Support for information and education activities.
6. Support for training and institutional development.

In addition descriptions are provided of PHA/POP's:

1. Population and family planning strategy.
2. Determination of priorities and size of programs.
3. Criteria to measure progress and indicators of program results.
4. Basis for planning, programming, procurement and distribution of contraceptives.
5. Plans for completion of AID population assistance.

BACKGROUND

A. Congressional Authority

AID, as an agency within the U.S. Department of State, has responsibility for carrying out certain U.S. development assistance programs which include "Title X - Programs Relating to Population Growth" of the FAA.

Under Title X, AID is authorized to provide loan or grant assistance for programs relating to population growth in friendly countries and areas. Such assistance may be provided to foreign governments, the United Nations (UN), its specialized agencies, and other international organizations and programs, universities, hospitals, accredited health institutions, and voluntary health or other qualified organizations.

In carrying out programs under this title, procedures are to be established to insure, whenever family planning assistance from the United States is involved, that no individual will be coerced to practice methods of family planning inconsistent with his or her moral, philosophical, or religious beliefs.

In addition, Congress authorized AID to increase the opportunities for motivation for family planning and to reduce the rate of population growth, encourage the integration of women into their national economies in order to improve the status of women, and assist the total development effort. Beginning in fiscal 1974 no foreign assistance funds "shall be used to pay for the performance of abortion or coerce any person to practice abortions".

B. Application of Title X Funds

By the end of fiscal year 1975 AID had provided approximately \$732 million in international population program assistance, approximately 60 percent of all resources available from all sources for international population program assistance. These AID resources have been applied approximately as follows:

- \$97 million for the United Nations population program

- \$135 million for the educational and family planning services programs of the International Planned Parenthood Federation, Population Council, Pathfinder Fund, Family Planning International Assistance, and Association for Voluntary Sterilization
- \$39 million for development of new and improved means of fertility control
- \$99 million for contraceptives and clinical supplies
- \$218 million for support of family planning programs in 40 countries (exclusive of contraceptives)
- \$110 million for development of more adequate demographic data, research on determinants and consequences of fertility, policy development, training and evaluation
- \$34 million for administration of the program

C. The Population Problem

The world's population, now at 3.93 billion, increased approximately 1.7 percent in 1974 - an increase of about 66 million people. Eighty-five percent of this population growth (56 million) took place in the developing countries. Moreover, nearly half of the developing country populations consist of children under 15, who have their childbearing years ahead. Modern sanitation and health programs, particularly in the developing countries, and reduced infant mortality rates have increased life expectancy. The built-in momentum of future population growth, deriving from this high proportion of young people is enormous.

Population growth is unequally distributed. Industrialized countries have reduced their average rate of growth to less than 1 percent per year, but in the developing countries of Asia, Africa and Latin America populations are increasing at rates of 2.5 percent to 3.5 percent per year. At these rates populations double in 20 - 28 years.

D. The Consequences

These high rates of population growth place an additional burden on already limited social and economic development

of developing countries. They absorb one-half to two-thirds of the annual increase in national product; limit educational opportunities; contribute to underemployment; and, as has been seen in many countries recently, they create food shortages, increased prices, and add to widespread malnutrition and famine. These conditions in turn place increased burdens on social and administrative services, contribute to social unrest, internal instability and violence, and external pressures that may injure neighboring countries.

E. U.S. Policy and Programs

The United States encourages multilateral organizations and other developed countries to allocate larger portions of their economic assistance to developing countries for population-family planning programs. While supporting the World Plan of Action as agreed by the World Conference at Bucharest in August 1974 and the U.N. resolution declaring the basic human right of individuals to have the information and means to determine freely and responsibly the number and spacing of their children, the United States believes that (1) both developed and developing nations have an interest in decreasing the global population rate, and (2) that demographic decisions made in any country, although an internal matter, affect other countries and should be a matter of worldwide concern.

Population assistance is not an alternative to development assistance; rather it is a vital form of such assistance. Although population problems must be solved by the developing countries themselves acting decisively and quickly, the United States and other donors can play critical roles helping developing countries to understand their problem and helping them as they develop their own capabilities for action.

The overall objectives of AID population assistance are to help developing countries and their people recognize the need for bringing population growth in line with their development objectives, to assist them in formulating and implementing actions to restrain population growth, and to help them gradually assume the necessary action responsibility themselves.

QUESTIONS POSED BY IGA TO THE AID OFFICE OF POPULATION
CONCERNING STRATEGIES AND CONCEPTS

1. What is AID's Population and Family Planning Strategy?
2. What are the main elements of AID's population assistance strategy?
3. What resources must the U.S. Government put into the foreign assistance population program in order to make a major impact towards solving the population growth problem in the LDC's?
4. How much longer will AID have to operate a population and family planning program? Total costs? Type, number and cost of commodities to be supplied?
5. How does AID determine the need, the size and the priorities for bilateral, regional and interregional programs?
6. How does AID evaluate the effectiveness of its assistance activities and the effectiveness of the less developed country (LDC) programs it helps support?
7. What is the phaseout time for the AID Population Program for each LDC, the regional program and the interregional programs?
8. What are the quantitative indicators of progress used to measure achieving the objectives of the AID Population program? What criteria are used to measure progress? Adoption of methods for comparing actual results of programs and projects undertaken?
9. Is the Population Office of AID staffed in number and quality to make policy, plan, program, budget, manage, evaluate and coordinate the population program?

Goal 1 - Demographic Data

10. What actions have been taken to assist countries in the collection and analysis of population and family planning data so they will have a sound basis for policy and program formulation, operation and evaluation and for the measurement of the impact of family planning on fertility?

11. Are there any new actions which need undertaking to ensure that the needed data are produced?

12. How accurate are currently available data? Does something need to be done to improve accuracy?

Goal 2 - Population Policy Development

13. What is the status of population policy development in countries experiencing serious problems of population growth?

14. What measures have been taken to support and speed policy development in these countries?

15. What are the priority new actions and emphases needed to promote basic policy development?

16. How is the support of social science research related to population policy development assistance?

17. What are AID's priority emphases in social science research support?

Goal 3 - Fertility Control Research

18. What has AID done to ensure the most effective fertility control technology is available to developing countries?

19. What has AID done to improve the efficiency and effectiveness of family planning delivery systems?

20. How does AID ensure research findings are utilized in LDC action programs?

Goal 4 - Delivery Systems

21. What do you consider to be the role of the grantees in achieving the overall objectives of Goal 4?

22. What is the basis for AID's planning, programming, procurement and distribution of contraceptives?

23. How do you respond to complaints from the Missions and LDC governments with respect to technical problems confronted in the development of the programs?

33. How has AID sought to use U.S. institutions to solve LDC FP problems and to develop LDC institutions to take increasingly important part in solving such problems?

34. What is the medium range need for LDC institutional development and how does AID propose to tackle it?

24. Do you feel that the grantees relationship could be made less stringent or is it necessary to maintain tight controls to assure compliance?

25. How do you test the cost effectiveness of various delivery systems in LDC's (commercial, national, integrated, village distribution, non-clinical)?

Goal 5 - Information and Education (IEC) Activities

26. Summarize the rationale for and the actions taken to develop the capacity of LDC FP programs to effectively use information, education and communications to recruit and retain acceptors, to generate a willingness to have small families and to generate understanding of and support for P/FP programs.

27. What training programs in the IEC area have been carried out and what are the graduates of these programs now doing in P/FP activities?

28. What research findings are there that can serve as guidelines for making IEC operations more effective and how is AID and its intermediaries applying those results?

29. What are the principal features of the IEC action program that PHA/POP plans to implement over the next three years?

Goal 6 - Training and Institutional Development

30. What is the estimate of the P/FP manpower needs that the LDC programs have for the next five to ten years? How was it arrived at? What are the functions that need to be performed? What manpower development goals have been set?

31. What manpower development programs is AID now supporting directly and through its intermediaries and how do they relate to meeting the identified goals? How do they fit existing Congressional mandates?

32. What are the problems of bringing U.S. capability and technical capacity to bear on the development of needed LDC FP manpower? How does the present and planned AID program tackle these problems?

Question 1: What is A.I.D.'s population and family planning strategy?

Response: The philosophic basis and the main elements of A.I.D.'s population/family planning program strategy were concisely stated and published in Science 10 January 1969, vol. 163, p 124. These stated program principles and goals have guided the development of A.I.D.'s population program throughout the past decade:

"The ultimate goal of this program is to improve the health, well-being, and economic status of the peoples of the developing countries by improving the conditions of human reproduction in these societies. We propose to move toward this goal by support of broad gauge population and family planning programs, designed to make family planning information and services fully available to all elements of these societies so that people everywhere need reproduce only if and when they choose.

"It has been argued that enlargement of human freedom by extension of family planning programs will fail to adequately curb the population increase and, therefore, other and even coercive social measures of population control are needed. This argument is largely based upon a narrow concept of what constitutes a family planning program. Some regard it simply as the provision of clinical and contraceptive services; others consider the many relevant actions contributory to greater use of available services and improved practice of family planning as an integral part of an effective family planning program. Viewed from this latter perspective, such actions as providing information and education, raising the marriage age, rescission of pronatalist laws and incentives, and repeal or liberalization of abortion laws are considered integral parts of a comprehensive family planning program.

"On the other hand, population planning control programs are distinctive from family planning programs to the extent they plan or control population dynamics by means other than fertility control, that is, by manipulation of mortality or migration or both.

"In A.I.D., to avoid confusion, we usually speak of the population and family planning program.

"A key judgment often heard is that the full implementation of family planning programs and the full exercise of fertility control by women and couples everywhere will fall far short of the goal of zero population growth because attitude studies have shown that women want too many children. But this judgment appears to be based upon the simple assumption that the composite response of women of all reproductive ages and experience to survey questions such as "What do you consider to be the ideal number of children?" bears a close and reliable relationship to the number of children women would have if they reproduced only if and when they wished, each month from menarche to menopause. This assumption is not supported by logic or definitive study.

Bearing and rearing children is hard work, and few women have unlimited enthusiasm for the task. If given the choice, each month, of whether they wish to be pregnant that month, many considerations of the desired family size will influence their reproductive behavior, and for many women postponement of pregnancy means reduction in the planned family size.

The current large excess of births over deaths in many developing countries has caused some pessimism concerning the collective wisdom of people individually exercising freedom of choice; but, on the other hand, there appears to be a sound basis for optimism: where in the world is there a country wherein people truly have the freedom and ability to control their fertility and where there is a continuing large excess use of their reproductive powers? The pattern seems clear that in those countries where women need not reproduce except if and when they choose (meaning they have access to hindsight (abortion) as well as foresight (contraceptive) methods of fertility control), the situation is encouraging. In Japan and several countries of Eastern Europe the net reproduction rate has fallen below 1, and social concern has shifted from the problem of too-great reproduction to concern for the possibly too-low reproductive rate. Certainly the high rates of abortion, even where illegal, as in the developed areas of Europe and the United States, and also throughout the developing world, bear witness to the determination of women in all cultures to limit their reproduction. Many women, whose foresight, knowledge, and means prove inadequate to prevent conception, will pay whatever they can and risk their lives to terminate pregnancies which they deem undesirable for reasons best known to them.

"Because the extent of availability of family planning information and means is now usually a dominant determinant in the complex of forces influencing reproductive behavior, no definitive studies nor final judgments of additional measures which may ultimately be needed to achieve a desired rate of population growth can be made in advance of the full extension of family planning services. But as family planning information and services are made appropriately available, key impediments to optimal utilization of such services can be identified. Thereupon research studies should be performed as needed to overcome recognized obstacles and for advancement of the program. Naturally, many nonclinical actions, such as rational alteration of legal and fiscal codes, should be taken concurrently with clinical actions to enhance the effectiveness of the population and family planning program.

"In addition to that special social measures may ultimately be needed for optimal regulation of fertility, it is clear that the main element in any population planning and control program should be the extension of family planning information and means to all elements of the population. It seems reasonable to believe that when women throughout the world need reproduce only if and when they choose, then the many intense family and social problems generated by unplanned, unwanted, and poorly cared for children

will be greatly ameliorated and the now acute problem of too rapid population growth will be reduced to manageable proportions."

Question 2: What are the main elements of A.I.D.'s population assistance strategy?

Response: At the current funding level of \$110 million for fiscal 1975, options are sharply limited with respect to how these monies can be applied to reduce excess fertility and population growth in developing countries.

The target population of A.I.D.-assisted population programs is half the world's people (2 billion) which when divided by the \$100 million available for programming after administrative overhead has been subtracted, equals 5 cents per capita. Furthermore, after \$20 million is subtracted for the U.S. contribution to the UNFPA, only 4 cents per capita remain. Obviously, these limited funds must be very carefully and sharply focused upon crucial actions if they are to have an important impact.

A.I.D.'s population program assistance strategy has been devised to obtain maximal impact through application of these limited resources. A comprehensive Report on the Population Program of the Agency for International Development was prepared and published by the Bureau for Population and Humanitarian Assistance, September 5, 1973. As detailed therein, A.I.D. has developed a comprehensive population program which for purposes of analysis and planning has been divided into six goal areas or categories of assistance:

- Improvement of demographic data
- Population policy development
- Research toward development of new and improved means of fertility control
- Support for family planning services delivery systems, including provision of contraceptives
- Support for information and education activities
- Support for training and institutional development

Altogether, actions in these goal areas are aimed at the fundamental objective of achieving general and appropriate availability of information and fertility control means throughout the developing world at the earliest possible time. Experience has demonstrated that the key determinant of utilization of fertility control means and of the impact of family planning programs upon fertility in developing countries is the extent of availability of the most effective means of fertility control. These means must become available in every village and in households before inexperienced peasants can use them. And only a minority of persons in the developing world have yet gained access to effective means.

Question 3: What resources must the U.S. Government put into the Foreign Assistance Population Program in order to make a major impact towards solving the population growth problem in the LDCs?

Response: We now envision that the U.S. Foreign Assistance Population Program will need to operate as a separate entity from 1965 to about 1985. Hence, we are at the halfway mark. During the past decade, thru June 30, 1975, AID obligated \$732 million for population program assistance. These funds have been applied as follows:

- \$97 million for governmental assistance programs of the United Nations Fund for Population Activities
- \$135 million for the educational and clinical programs of the International Planned Parenthood Federation, The Pathfinder Fund, Family Planning International Assistance-Church World Service, The Population Council and Association for Voluntary Sterilization
- \$99 million for purchase of contraceptives and other fertility control materials. AID is now the leading source of contraceptive supplies for LDC family planning programs. To date, some 345 million monthly cycles of oral contraceptives, 930 million condoms and 6.1 million IUDs have been purchased.
- \$39 million for development of new and improved means of fertility control
- \$218 million for support of family planning programs in 40 developing countries on a bilateral basis exclusive of contraceptive supplies. Foremost recipients of bilateral assistance have been:

Philippines
India
Indonesia
Pakistan
Thailand
Tunisia
Korea
Afghanistan
Ecuador
Ghana

- \$110 million for development of more demographic data; research on determinants and consequences fertility; policy development training and evaluation

- \$34 million for administration of the program

Thus, the availability of AID funds has made a crucial difference in the ability of the world to respond to its population crisis.

It is believed that the annual funding level for this program should be advanced as rapidly as possible to the level of about \$250 million per annum and kept at that level until the early 1980s when a phase down of population program assistance might commence, with full reintegration of this functional program into more general health programs planned for about 1985. We believe that essential U.S. contributions toward solution of population problems in developing countries can be achieved at a cost of about \$3 billion.

Question 4: How much longer will A.I.D. have to operate a population and family planning program? Total costs? Type, number, and cost of commodities to be supplied?

Response:

Future Trends and Needs

While major changes have occurred in the world population situation during the last decade, much more work needs to be done by A.I.D., other donors, international organizations, and the LDCs themselves. In addition to insuring that each effective means of family planning and services is fully and readily available to all classes of people -- especially in rural areas -- throughout the developing world, vigorous informational and educational efforts are needed to achieve full utilization of available means and services.

Great inertia and built-in momentum for population growth characterizes developing countries which have disproportionately large numbers of children, and it will take considerable time for population and family planning programs to fully solve problems of excessive fertility and population growth.

But it is now apparent that essential international assistance for population and family planning, even in large and difficult countries such as the Philippines and Indonesia, can be accomplished within a time frame of approximately 10 years and at a total average cost of approximately one dollar per capita. This appraisal assumes the absence of wars, revolutions, other political upheavals, natural catastrophes, etc. At the end of such a decade of international population program assistance it is expected that the less developed country would ordinarily have formulated appropriate population policies, achieved country-wide coverage and broad acceptance and use of effective means of fertility control, and birth rates would be moving down rapidly, usually through the twenties.

Furthermore, it appears that essential U.S. population program assistance on a global basis could be largely accomplished during the 20 years from 1965 to 1985 -- if the U.S. Congress provides steadfast and strong support for this program during the second decade of its operation, as it has during the first decade. The level of funding needs to be increased to about \$250 million per annum and maintained there for a number of years. The total cost of this 20 year program of U.S. assistance for resolution of the world population crisis should be about \$3 billion.

Large supplies of contraceptives - mainly oral contraceptives and condoms - are needed for efficient implementation of family planning programs.

In addition to the \$99 million applied for contraceptives and other fertility control commodities through FY 1975, it is estimated that rapidly increasing funds will need to be applied for this action during ensuing years, approximately as indicated:

1968 - 75	\$ 99 million
76	39 million
77	60 million
78	80 million
79	100 million
80	100 million
81	100 million
82	80 million
83	60 million
84	40 million
85	20 million
<hr/>	
Total	\$778 million

To the extent that other donors, especially through the UNFPA, pick up a much larger responsibility for this action than they have to date, it would be possible to reduce USAID expenditures for contraceptives. But we believe that A.I.D. must plan to apply a total of more than \$½ billion for contraceptives during the 20 years, 1965 - 1985, if the U.S. is committed, as is often stated, to doing what it can to achieve rapid solution of the world population crisis.

Question 5: How does A.I.D. determine the need, the size, and the priorities for bilateral, regional, and inter-regional programs?

Response: This determination is the product of the interaction of a number of factors such as greater or lesser opportunities for bilateral support action, the strength of regional organizations available for program action, and the opportunities and need for action by inter-regional bodies or programs.

Ordinarily program support can be accomplished most rapidly and efficiently by bilateral activity, but where there is political sensitivity or other barriers to such bilateral assistance, it is necessary and desirable to program the monies through regional or inter-regional organizations to achieve selected purposes.

Question 6: How does A.I.D. evaluate the effectiveness of its assistance activities and the effectiveness of the LDC programs it helps support?

Response: The office of Population has been guided by M.O. 1026.1 which describes policy and process for evaluation of technical assistance and other non-capital projects.

A.I.D. studies and evaluates the effectiveness of its population program assistance by the nature, magnitude, and timing of project and program inputs as they relate to the nature, magnitude, and timing of project and program outputs. For example, inputs consisting of funds, advisory services, training, and commodities are related to outputs, such as trained personnel, availability of contraceptives and fertility control services, utilization of family planning services, and prevalence of use of each method.

From such analysis of program input and output patterns one can gain an increasingly accurate view of the probable effectiveness of population program assistance. But the "bottom line" measure of the effectiveness and efficiency of A.I.D.'s population program assistance is its relationship to fertility change in countries where this assistance is applied.

To provide a basis for such evaluation of family planning impact on fertility and development in countries, A.I.D. has supported improvement of demographic data in many countries by means of surveys, censuses, and registration of vital events. The following are examples of ongoing projects within PHA/POP designed to collect data on program effectiveness:

The Bureau of the Census PASA provides technicians and trains LDC technicians for the task of estimating current fertility levels and fertility trends through analysis of census, survey, and vital registration data and through the design and implementation of these data gathering activities. Without this resource, we would have no up-to-date and accurate files of fertility estimates for the priority LDCs. Without this resource, the quality of data gathered and analyzed to measure program impact would be much lower. Without this resource, the time needed to process data would be much longer. The Census Bureau PASA gives us the advantage of comprehensive coverage, accuracy and speed.

The East West Population Institute focuses upon those Asian countries which are of highest priority in terms of measurement of program impact, coordinates its activities with those of the Census Bureau to assure that data is shared and that technicians do not needlessly overlap. EWPI has developed innovative methodologies for analyzing census data so as to unravel fertility trends. EWPI training programs have resulted in close personal rapport between Asian researchers and decision makers and EWPI staff. EWPI expertise encompasses a broad range of disciplines which focus upon cultural and socio-economic factors which influence fertility and which also condition attempts to measure it.

Laboratories for Population Statistics (University of North Carolina) was originally designed to test and improve methods of demographic data collection in selected developing countries (e.g., Philippines, Colombia, Morocco, and Ecuador). Recently, the project was redesigned to emphasize the application of tested and improved data collection methodology to insure a continuous flow of reliable data on births and deaths for the country as a whole and for major subdivisions. These timely and reliable demographic data are indispensable for accurate measurement of program impact. A national Turkish Demographic Survey has been established in Turkey and the Demographic Studies Unit in Kenya is being expanded to approximate a nationally representative data collection system.

The World Fertility Survey will furnish technical expertise and share costs for data gathering and analysis for national surveys at five year intervals in priority LDCs. The WFS is acting as a coordinating mechanism, assuring that data that might have been gathered anyway is now secured with greater potential for comparability and accuracy. It will also facilitate rapid processing of national fertility data.

Application of Methodology for Evaluating Family Planning Programs, Columbia University. The principal thrust of this program is being re-directed to make its objective the conduct of operational research through the Division of Social and Administrative Sciences, Institute for the Study of Human Reproduction, Columbia University. Previously, the program provided family planning evaluation technical assistance to country programs.

The International Institute for the Study of Human Reproduction at Columbia University will undertake the development, implementation, and analysis of new field operational research projects. In addition, the Institute will develop improved methodologies for such research and will provide short and long term consultations for research efforts in developing countries. The Institute will be responsible for acquiring, indexing, assessing, and disseminating materials relating to operational research.

Utilization of Evaluation Resources

To get assistance for its evaluation efforts, PHA/POP draws upon a resource base which it has developed. That resource base includes a variety of organizations^{1/} and a number of individual consultants.

The means of tapping into this resource base has been: task orders written on Basic Ordering Agreements, Resources Support Services Agreements (successors to PASAs), University Services Agreements, and ordinary contracts for consultant services.

^{1/} American Pub Hlth. Assn., Bureau of the Census, Center for Disease Control, Columbia University, Johns Hopkins University, Management Services for Health, University of Chicago, University of Hawaii, University of Michigan, Univ. of North Carolina and others.

Question 7: What is the phase-out time for the A.I.D. population program for each LDC, the regional program and the inter-regional programs?

Response: On the basis of a decade of experience with population program assistance, we now believe that essential U.S. population program assistance can be achieved in individual developing countries within a time frame of about 10 years, if there is steadfast commitment to this action by LDC leaders. The action is already finished in small countries in the vanguard such as Singapore, Hong Kong and Taiwan, and the final tranche of A.I.D. bilateral population program assistance in Korea was completed in 1975; the action is moving so favorably in other countries, such as the Philippines, Thailand, Indonesia, Tunisia, Costa Rica, Jamaica, Panama, Colombia, El Salvador and Chile, that we expect to terminate assistance to those countries about 1978. In other countries in Latin America, Asia, and especially Africa, the programs are not sufficiently advanced that we can now program termination of our support. Ordinarily we must launch a population program assistance effort and pursue well chosen goals steadfastly for at least five years before we can begin to program the termination of such assistance.

We expect that support for regional programs and inter-regional organizations will continue throughout the suggested 20-year time frame of the A.I.D. population program, and U.S. support for population programs through multilateral agencies might continue for some years after 1985.

Question 8: What are the quantitative indicators of progress used to measure achieving the objectives of the A.I.D. Population Program? What criteria are used to measure progress? Adoption of methods for comparing actual results of programs and projects undertaken?

Response: In addition to the information provided in response to question 6, it may be helpful to consider two charts - one showing fertility changes in a dozen countries which had vigorous family planning programs during the 1960s and another showing a dozen countries which did not have such programs. (Figures 2 and 3). See pages 85 and 86.

Additionally, we are mindful that our goal is to reduce excessive fertility and too rapid population growth throughout the developing world. Hence it is useful to look at what is happening to fertility in all countries for which data are available (Figure 4). * The technique of presenting age-specific fertility rates for several time periods as silhouettes (innovated by PHA/POP) permits one to see at a glance both what has been done (gray areas) and what remains to be done (black areas). This wall chart is currently being revised to show data for 122 countries, which will make it additionally comprehensive and valuable.

*See pages 86a-86f

Question 9: Is the Population Office of A.I.D. staffed in number and quality to make policy, plan, program, budget, manage, evaluate and coordinate the population program?

Response: Over the past ten years, as the A.I.D. population program grew from a policy without program or funds to its present level of over \$100,000,000 annually, the staff grew in size, variety, and quality. At the time of Agency reorganization in 1972, when geographic bureau and Technical Assistance Bureau staffs were combined to form the present program under central direction, 95 full-time positions were assigned to the Office of Population. But only 62 of these were initially filled, creating a severe handicap.

By December 1973, the Office had reached a level of 95 on board staff, organized into six functional and four geographic divisions. The program was at a peak level with 120 prime projects, over 500 sub-projects and operation -- directly or indirectly -- in over 70 countries.

As with most new and rapidly developing action programs, the bureaucratic pressures to conform to standard procedure and meet all paper work standards were somewhat suppressed during the initial period of growth and establishment. Pressure was mounting, however, to comply with the letter as well as spirit of Agency documentation requirements. Combined with intensified competition for funds -- both among existing lines of population program action and for other program actions (principally health) -- this situation demanded that more effort be put into coordination, planning, budgeting, and project evaluation. Furthermore, as field projects matured, restricted overseas staff levels limited A.I.D.'s ability to provide adequate technical back-stopping. There was (and still is) urgent need to supplement existing capacities with additional technical staff.

Under these circumstances, the PHA Bureau requested 17 additional positions to strengthen the program. In late December 1973, eight new positions were authorized, for a new total of 103.

Later, as part of an additional effort to strengthen the program and, in light of increased congressional interest in higher funding levels, the PHA Bureau requested 22 new positions for PHA/POP. This increase was part of a larger package that included redistribution of project portfolios, clarification of certain functional areas, and some reorganization. (See Attached Package.)

Unfortunately, this request was overtaken by the Agency decision to sharply reduce A.I.D./Washington employment levels. The result was an 18 percent reduction in position strength from 103 to 84 -- or a real reduction from the peak of 96 on board to the current target level of 80 on board by June 1975. By March 1975, PHA/POP was already down to 83 full-time employees.

Given project portfolio size, program planning, liaison and coordination desirable, and urgency of the global population programs -- as well as the expectation that the budget will rise -- PHA/POP feels that additional staff is urgently needed for the management and implementation of the population program.

Question 10: What actions have been taken to assist countries in the collection and analysis of population and family planning data so they will have a sound basis for policy and program formulation, operation and evaluation and for the measurement of the impact of family planning on fertility?

Response: The Office of Population has undertaken a vigorous program to assist countries to collect and analyze population and family planning data.

Recognizing that the collection and processing of reliable data can be costly and time consuming, a careful analysis was made several years ago of the steps required to obtain data. Regardless of the type of data collected, the process was found to be essentially the same. Information relating to individual reporting units must be recorded on a preprinted form. The reporting unit may be persons, families, or households, as in a census or survey, an event such as a birth, death, or visit to a family planning clinic, units of commodities (e.g., contraceptives) etc. The completed forms must be transmitted to the central processing center where information is transferred to computer readable form using one of only four or five techniques (e.g., card punching, key to tape).

Once in computer, readable form information must be edited to identify and correct where possible contradictory or incredible responses (e.g., a pregnant male, a 20 year old grandmother). Edited data are then tabulated and printed in tabular formats for use. The data are then ready for analysis. Much time had previously been spent preparing computer programs tailored to specific tasks, often using inexperienced programmers who produced inefficient programs.

About 1970 A.I.D. supported the Census Bureau in the development of a highly efficient tabulation package called CENTS. This computer software was designed for the IBM 360 Model 25 and up. CENTS was an immediate success and was adopted by a large number of countries.

Because not all countries have IBM 360 computers, a companion package called COCENTS, written in the COBOL language and adaptable to a number of computers was later developed. COCENTS has been made operational on computers manufactured by several U.S. companies as well as to Japanese and British computers. CENTS/COCENTS is now operational in more than 40 countries and the demand is still strong. It has been used for virtually every type of data.

Breakthroughs have also been made with Edit routines and a generalizeable Edit package is planned. In addition, packages of analytical programs have been developed and disseminated.

Research on methods of measuring demographic change has resulted in the perfection of several methodologies.

Although R&D results were applied as rapidly as possible, efforts to assist countries with data collection and analysis were not held up. The Africa Census Program, designed to provide data for African countries which had not previously conducted a census, was pressed at the UN Population Commission. Following adoption by the UN, A.I.D. provided technical assistance and training in support of the program.

The World Fertility program, also originating in PHA/POP, became a joint effort with the UN and other donors to obtain a better understanding of fertility patterns in 40 or 50 countries.

Recognizing that family planning programs were a new phenomenon and that few guidelines existed for their design and management, PHA/POP evolved the concept of management information systems designed around management needs to provide the information required for sound management decision making. Stated simply, the process of developing an MIS calls first for the identification of "Decision Points." That is, which individuals in the organization are required to make what decisions and what interval of time? Given this information, the next step is to determine what information is required at each decision point to enable the decision maker to arrive at a sound management decision. Obviously the information needs must be within the practical capability of the program to collect at an acceptable cost. With this information an MIS can be designed and implemented. Such systems have been implemented in more than a dozen countries with varying levels of A.I.D. assistance. The most successful system receiving AID assistance has been the one in Indonesia. Key components of the Indonesian system are currently being communicated by AID to other country programs and advocated for adoption.

The Office of Population has also instituted a quarterly and annual family planning services data reporting requirement for all programs receiving AID support. This reporting system provides AID and program managers with a current view of program progress and deficiencies. These reports help PHA/POP identify problems in the collection and accuracy of family planning service statistics, in the management of contraceptive inventories, and in distribution and use of contraceptives. PHA/POP responds to these problems by offering short term technical assistance to programs to rectify inadequate procedures, establish new ones and break logistical bottlenecks. During the past seven months, PHA/POP has assisted fifteen countries with solution of problems identified through these reports.

Question 11: Are there any new actions which need undertaking to ensure that the needed data are produced?

Response: Several new actions are needed. First, there is a paucity of fertility data for many LDCs which have large family planning programs. Others experience delays in existing systems of data collection. PHA/POP needs to vigorously pursue several fronts.

Most countries require that births and deaths be registered. However, there is great variability in the degree to which this requirement is fulfilled. Some countries register a large proportion of these events but have difficulty processing the data. Others have less complete registration overall but have sections of the country where registration is more complete. These countries can and should be helped to improve the vital registration systems to provide timely data on fertility and mortality.

For countries where registration systems are so weak that they could not be expected to produce useful data within an acceptable time frame and on an interim basis pending the improvement of registration systems in other countries, other approaches should be used to obtain fertility/mortality data. Sample surveys, sample registrations, and dual record systems are among the methods that can be employed.

The above efforts will provide valuable data on the general level of fertility. However, there is a need to document the specific impact of family planning programs. A new project for FY 76 is planned for this purpose.

Each decade - often in the year ending with the digit zero - countries carry out censuses of their populations. Since its establishment the UN has encouraged countries to carry out censuses and this effort has been instrumental in obtaining country support.

The year 1980 will be a census year and those censuses will produce very valuable data on the accomplishments of family planning programs as well as data needed for many other purposes including assessment of the impact of population on development. In order to be ready for those censuses and to insure that they are rapidly processed to provide timely data, work must begin now to devise training programs, perfect methodology, etc.

Question 12: How accurate are currently available data? Does something need to be done to improve accuracy?

Response: Currently available data vary widely in their degree of accuracy and care must be exercised in their interpretation. It is often difficult to judge the accuracy of data because evaluation of data is often ignored by LDC data collectors. Data from surveys are often published without sampling error which can greatly influence interpretation of data.

We have for some time encouraged countries to evaluate their data and to provide estimates of sampling error and other biases to enable users to know what faith to place in the data. More and more countries are beginning to understand the importance of variations in accuracy and are seeking help in evaluation and improvement of accuracy.

Considerable improvement in accuracy of fertility data can be expected when programs for a census in every country; a national representative household survey (WFS) in every country; and registration of vital events are all implemented, mature, and permit cross checks on the validity of data available from other sources.

Question 13: What is the status of population policy development in countries experiencing serious problems of population growth?

Response: Population policy development of a country falls into one of four stages: policy start-up, inadequate policy, maturing policy, and self-sustaining policy.

^{1/}
Based on the PHA/POP "raw list" of 92 countries, the top 20 countries, those which have the most serious population problems, fall in the first three stages of policy development. Eight of the 20 (Nigeria, Ethiopia, Sudan, Mali, Afghanistan, Yemen A.R., Burma, and Brazil) are in the "policy start-up" stage. These countries have not yet developed a significant national policy to restrain fertility. Implicit population policy may be pro-natalist. A national consensus to support the development of population policy is weak or absent; popular views may favor rapid population growth as a way to national greatness.

Six countries are in the second stage, "inadequate policy." Zaire, Tanzania, Bangladesh, Nepal, South Vietnam and the Khmer Republic have generally adopted some form of population growth control policy but the public commitment has shallow roots in terms of demographic understanding and an inadequate pace and breadth of implementation. No high level governmental body exists with the power to coordinate national policy. Many influential public officials pay lip service to the policy.

The last six countries (India, Indonesia, Pakistan, Thailand, the Philippines and Kenya) have "maturing policies." Policies have been adopted and a basic institutional framework has been established to promote the implementation of policy. However, policy decision is not translated into adequate support; population policy tends to rely solely on family planning efforts to achieve lower fertility goals. There is need to orient development initiatives outside of the area of family planning towards support for lower fertility. Moreover, the national coordinating body occasionally needs expert consultant services and it lacks adequate staff training opportunities to ensure its continuing effectiveness.

None of the 20 countries are in the fourth stage, "self-sustaining policy," where there are reasonably adequate national policies and institutional bases to carry them on.

The following table displays the approximate policy development status and comparative priority claim on A.I.D. support for 92 countries.

^{1/} The PHA/POP "raw list" is a priority ranking of developing countries employing basic demographic and economic data as a measurement of relative assistance claims. The variables used are (1) projections of country population growth over the decade of the 1970s, (2) an index comparing country birth and death rates to average developed country vital rates and (3) GNP per capita.

Geographic Priorities for Action Agenda

"Raw List" Ranking	Policy Start-Up	Inadequate Policy	Maturing Policy	Self-Sustaining Policy
1-20	Nigeria Ethiopia Afghanistan Sudan Brazil Yemen A.R.	Bangladesh Zaire Tanzania Nepal S. Vietnam Khmer Rep.	India Indonesia Pakistan Philippines Thailand Kenya	
21-40	Upper Volta Malawi Niger Haiti Algeria Malagasay Rep.	Turkey	Morocco Egypt Mexico Colombia Ghana	Iran S. Korea
41-66	Mozambique Bolivia Dahomey Peru Cameroon Togo Sierra Leone Senegal Jordan	Ecuador Guatemala Honduras Liberia	Malaysia Dominican Rep. El Salvador	Taiwan
67-92	Mauritania	Lesotho Nicaragua Paraguay Zambia Panama	Venezuela Tunisia Botswana Costa Rica Jamaica	Chile Mauritius Hong Kong Singapore

No Action:	Angola Argentina Bhutan Burma Burundi C.A.R. Chad	Congo Cuba Guinea Guyana Iraq Ivory Coast Kuwait	Laos Lebanon Libya Mali New Guinea Oman Rwanda	Saudi Arabia Somali Sri Lanka Syria Uganda Uruguay Yemen P.R.
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Question 14: What measures have been taken to support and speed policy development in these countries?

Response: Efforts have been directed towards the development of understanding, indigenous expertise, and institutionalized capacities in the population field. High priority, particularly in countries in the "policy start-up" stage, has been given to dissemination of information among decision makers on the unfavorable impact of too rapid population growth on national development goals and on the need for policies to encourage lower fertility. Of equal importance, particularly to those countries with inadequate policies, are the analyses of consequences of population growth, the social and economic determinants of fertility, the status and implications of laws on population. Through these efforts the decision makers and the scientific community of a country develop an understanding of population dynamics relative to their own situation and, hence, implement rational population policies.

The means to achieve the above objectives in the policy development area have been centered around country studies and conferences to bring decision makers together with population experts. Through FY 74 a total of 50 sub-projects supported by seven A.I.D. contracts in the policy development area have been initiated to study population factors in 14 or 20 countries experiencing serious population growth problems. At least 23 international conferences sponsored by 10 of the these projects have reached decision makers in 15 of the 20 countries.

(a) Sub-Projects. Of the eight countries in the "policy start-up" stage, four have been subjects of country studies. The majority (32) of the 50 sub-projects were directed at the more receptive six countries with maturing policies. Examples of these 50 sub-projects include work agreements executed by the Interdisciplinary Communications Program (ICP) of the Smithsonian Institution with indigenous researchers to study social and economic determinants of fertility by country. The American Academy for the Advancement of Sciences (AAAS) has initiated studies of cultural factors in population dynamics, employing host country scientists. Tufts University through the International Advisory Committee on Population and Law (IACPL) has compiled and analyzed national laws related to population and fertility control.

(b) Conferences. Workshops and seminars have reached decision makers in five countries in the "policy start-up" stage, four of them with inadequate policies. The ICP has held nine conferences on the population problem and determinants of fertility. The AAAS held a seminar in Bucharest just prior to the World Population Conference to discuss the studies on cultural consequences of population growth. The IACPL sponsored a seminar on law and population in Nairobi, while the National Academy of Sciences held five international seminars on population dynamics.

Question 15: What are the priority new actions and emphases needed to promote basic policy development?

Response: The thrust of policy development actions and emphasis will continue to be towards the promotion of better understanding of population dynamics and the development of indigenous expertise and institutionalized capacities to effect rational population policies. The principal vehicle to carry this thrust will be project activities programmed to achieve specific objectives in specific population fields.

However, "new research" and "new conference" projects are being implemented to permit responsive, selective action needed to meet changing priorities and to fill gaps in on-going assistance efforts. Policy development priorities naturally change over time as countries progress in population policy development. In some countries political resistance to population assistance exists but in time may diminish, hence providing need for different kinds of aid. Changes in geographic priorities, in turn, imply changes with respect to both target groups and modes of communication.

Moreover, new research initiatives in selected areas complement on-going activities and will improve the state of knowledge about the determinants of fertility and the consequences of rapid population growth. Conferences will disseminate information among audiences heretofore not principal targets in population assistance efforts and hence will broaden the base of influential action groups that can effectively contribute towards rational population policies.

Question 16: How is the support of social science research related to population policy development assistance?

Response: Population policy is subject to endless change in nearly every country. In part this condition derives from the continued evolution of the unique set of demographic, economic and social factors that shape each country's current development prospects. In addition, population policies are often closely identified with forceful public figures whose own rise or fall in power greatly affects the state of policy commitments. Finally, it should be recognized that public decisions typically rest on inadequate demographic data and rough-and-ready analysis. As improved data and better studies come to light, yesterday's policies are more finely tuned or yield to more relevant expressions of public commitment.

Goal Two activities seek changes in the policies of other sovereign governments. The key instrument in this extremely sensitive effort is not leverage, but a focussed, sequential program of persuasion. A.I.D.'s role is to enlist and support indigenous forces who will themselves determine and implement whatever measures are needed to promote policy development. Goal Two strategy, therefore, employs all the arts of research and persuasion so as to discover and elaborate lines of informed national self-interest that, in turn, can buttress an adequate fertility control policy. In such a strategy A.I.D. plays the role of an information broker, bringing together the experts who study the problems of population growth with the decision makers of the developing countries who direct resources to deal with these problems.

The above principle of policy development and strategy presumes the existence of a body of social science research findings that make effective and comprehensive population policy development possible. Insofar as the basic stock of population dynamic knowledge is inadequate to service policy requirements, there is justification for a strategy to fill the critical knowledge gaps. In fact, despite the accumulation of a large store of knowledge about the interactions between demographic and development variables, some critical gaps remain that prevent certain kinds of policy action.

Research efforts relevant to policy development needs narrow drastically to four areas: (1) study of those consequences of rapid population growth that, in the view of a significant body of developing country policy makers, are favorable to development, e.g., low density countries that relate population growth to the effective occupation of national territory; (2) research on those socio-economic determinants of fertility whose close association with fertility decline is known but where research findings are not specific enough to guide policy decisions, e.g., the kind of female education (and/or type of student) that is most likely to bring about reduced fertility; (3) cross-country studies designed to distill from country research more general findings (that detail tends to obscure in country focussed studies) and new or revised hypotheses to be tested in specific

country research, e.g., cross-country research may spotlight a common education threshold beyond which further female education has little effect on fertility; (4) finally, research on policy to clarify the processes of policy formulation and development, thereby providing an improved knowledge base for the policy development strategy related to target groups and modes of action.

Question 17: What are A.I.D.'s priority emphases in social science research support?

Response: Highest priority in social science research will be given to those lines of inquiry likely to result in clear prescriptions for public decision makers, to wit, research on the social determinants of fertility. It is generally considered that consequences and determinants research are appropriate to different stages of the population policy development process in different countries. The more advanced a country is in the development of population policy and the more committed its leaders are to population growth limitation, the more receptive such a country is likely to be to research on the determinants of fertility. The assumption underlying this generalization is that the greater the understanding by a country's leaders of the consequences of population change, the more receptive they are likely to be to research which examines variables which may determine fertility rates and over which they, as leaders, have at least potential control.

Furthermore, most country-specific research on determinants of fertility will focus on those countries whose rate of natural population increase poses the most serious problem for the world as a whole. Not surprisingly, many of the countries which have gone farthest in the development of policies and commitment to control fertility are also those which contribute most substantially to world population growth (i.e., India, Indonesia, the Philippines, Pakistan, Bangladesh, Thailand, Zaire, Nepal, Kenya, Morocco, Egypt, Mexico, Iran and Colombia). It will be these countries which will receive highest priority attention for social science research initiatives.

Research funds presently and prospectively available to PHA/POP for social science research make it unlikely that A.I.D. would be able to support significant new determinants research anywhere outside some of the countries identified above. It is possible that small-scale determinants research will continue to be supported, mainly in countries considered to have weaker population policies but to be demographically more important (e.g., Nigeria, Ethiopia, Afghanistan). However, A.I.D. is by no means alone among the international agencies supporting determinants research. Since only a few selected countries will be eligible for large-scale social research on the determinants of fertility in the near future, PHA/POP plans to engage in the closest possible coordination with other agencies and organizations to minimize overlap of activities.

Funds allocated to this category will support one or more new centrally monitored projects, or under Policy Division's general direction will be transferred to bilateral projects or, if appropriate, will be used to supplement programmed funds for existing projects if these appear to be the preferred vehicles for new efforts.

Question 18: What has A.I.D. done to ensure the most effective fertility control technology is available to developing countries?

Response:

(a) Introduction

A.I.D. has maintained programs of research, training, and commodity procurement and supply to ensure that effective fertility control technology is available to developing countries. In this section, research to develop and test this new technology will be discussed. A.I.D.'s role in provision of commodities is discussed under Question 22, and A.I.D.'s role in training is described under Question 31.

The A.I.D. Office of Population has maintained an active worldwide surveillance of new developments in fertility research. New findings and developments become the basis for A.I.D. sponsored research needed to develop new means of fertility control, adapt current means to the specific needs of LDCs, and to test new means under use conditions in LDCs.

(b) Biomedical Research - The Importance of Technology

The high priority given to development of improved means of fertility control by A.I.D. during the past seven years has been based on the premise that the nature of available fertility control technology is a foremost determinant of fertility control behavior and of the time and fiscal requirements for a fertility control program to achieve its objectives.

Evidence for this premise is derived from examination of the impact of evolutionary changes in fertility control technology in the past century and more recent studies of the impact of fertility control technology on family planning practices, programs, and fertility in many cultures.

The implications of technology for the nature and cost of fertility control programs are shown in Table 1.* There are few examples of countries relying solely on tier two technology who have solved their problems of excess fertility; certainly none of the less developed countries have managed this feat and it is difficult if not impossible to identify a country where tier four technology is generally available which is not well on the way to solution of its problems of excess fertility.

The varying impact of family planning programs with different technological emphases upon national fertility patterns is becoming increasingly apparent. Ravenholt, Brackett, and Chao have recently presented graphic comparisons of age specific and total fertility rates for a number of countries during three time periods, 1960, 1965, 1970, which can be related to the technological means generally available for fertility control in those countries. (See Figure 1)**

*See page 87

**See page 84

The people of Mexico have been largely limited to tier one technology during the decade of the 1960's because of religious and legal inhibitions and the national fertility pattern remained stable at a high level despite very large changes in general economic and social development.

Taiwan, also undergoing rapid economic development during the decade of the 1960's, launched a family planning program in 1963 making intrauterine devices available but omitting oral contraceptives from the program until almost the end of the decade.

This program appears to have had substantial impact upon age-specific fertility rates of older women, in their 30's and 40's, but little impact upon the fertility of younger women.

In Hong Kong, on the other hand, where tier three technology became generally available about 1966-67, with considerable preference for oral contraceptives, a sharp decrease occurred in fertility of all age groups.

The very large impact of tier four technology upon fertility is indicated by Japan's fertility pattern. Following enactment of its Eugenic Protection Law in 1948, which gave women legal access to abortion, birth rates quickly plummeted to the low levels shown in Figure 1; where they have remained for two decades despite continued restrictions upon availability of oral contraceptives and intrauterine devices.

Therefore, although many other factors influence the fertility patterns shown in Figure 1; the nature of available fertility control technology appears to be a foremost determinant.

Cultural differences may seriously limit acceptability of certain methods, for example those requiring pelvic examinations or those causing the side effect of vaginal bleeding. Health and nutritional considerations may cause problems with methods which are successful in the U. S. For example, increased bleeding is a serious problem for IUD users already anemic from parasitic infestations and decreased lactation among some users of oral contraception may compromise infant nutrition in certain settings.

Therefore, new methods which have greater acceptability in less developed countries are needed. Any new means of fertility control must be acceptable both to individuals and to society. Furthermore they must be adequately safe, and practical for use in family planning programs from the point of view of administrative feasibility and cost effectiveness.

(c) Biomedical Research to Develop Improved Fertility Control

Since its inception in 1965, A.I.D.'s assistance for family planning has been provided only to voluntary programs -- programs making it possible for individuals and families to regulate their fertility in keeping with their personal desires. Any research on fertility control technology sponsored by A.I.D. seeks methods consistent with this exercise of individual choice.

*See page 84

The AID research program has been directed toward applied rather than basic research, and has pursued relatively few leads in depth rather than attempting to explore all possible approaches. Relevance to the needs of developing countries has been a consideration of paramount importance in the selection of topics for research. Between FY 1967 and FY 1975, AID applied \$39 million toward development of more effective means of fertility control, as indicated in Table 2.* Interestingly, although \$14.6 million of those funds was applied toward development of new means of fertility control, e.g., prostaglandins, antiprogestins, and antigonadotropin releasing factors, and only \$12.6 million applied toward improvement of existing means, it is now apparent that the most important gains to date have been achieved through the less costly research aimed at improvement of more familiar technologies, e.g., oral contraceptives, condoms, laparoscopic sterilization, and pregnancy termination.

Despite (or perhaps because of) the relative simplicity of these improvements in existing technologies, they are proving of crucial value and are now exerting a powerful "multiplier effect" upon the effectiveness and efficiency of family planning wherever they are being made available. Funds have been applied in three areas: (a) research on new means ; (b) research to improve currently available means of fertility control; and, (c) comparative clinical field trials of means of fertility control use conditions in less developed countries.

(1) Research on New Means of Fertility Control

Corpus Luteum and Antiprogestin Studies - In the search for fifth tier technology, AID has obligated \$4.8 million for over 40 studies seeking new ways to control corpus luteum function and block progestational activity. This program has been implemented through the Population Council, the U.S. National Institutes of Health, and the Worcester Foundation for Experimental Biology. Research approaches have included work to identify natural and synthetic luteolysins and studies of compounds interfering with progesterone synthesis and biologic activity at the target organ level.

Releasing Factor Studies - Since fiscal 1970 the Salk Institute has received \$4.4 million from A.I.D. for research to develop inhibitors of gonadotropin releasing factors as contraceptive agents. Additional support has been provided by Ford, Rockefeller, and other foundations. Following identification of the structure of porcine and ovine luteinizing hormone releasing factor (LRF) in 1971, studies at Salk have identified several anti-LRF substances which now await clinical trial. Although their ultimate utility as means of fertility control remains to be demonstrated, these compounds are likely to be orally active and might be developed into a method singularly devoid of untoward side effects.

Prostaglandins - Since fiscal 1968, A.I.D. has obligated \$7 million for prostaglandin studies which have included research on new means of measurement, new approaches to prostaglandin synthesis, studies of formulation and delivery methodology, compound screening, studies of the

*See pages 88-89

effects of prostaglandins on mammalian and primate reproductive physiology, human clinical trials and a prostaglandin information service. This work has been carried out at 15 institutions, either funded directly or through a program coordinated by the Worcester Foundation for Experimental Biology. Organizations conducting A.I.D. sponsored prostaglandin research include Harvard, Makerere University (Uganda), the Royal Veterinary College (Sweden), Oxford, the University of North Carolina, Johns Hopkins, Washington University (St. Louis), Wisconsin, the University of Singapore, and George Washington University.

Although further testing and developing is necessary, these compounds and their analogs appear to be most promising as a means of regulating or inducing the menses when used up to a week after the expected menses and as a means of pregnancy termination in the second trimester. Use in the later part of the first trimester is still hampered by side effects, some therapeutic failures, and incomplete evacuation of the uterus. It is hoped that new prostaglandin analogs and improved delivery systems can overcome these problems.

(2) Research to Improve Current Means

Although A.I.D. is sponsoring research to achieve "Fifth Tier" technology, a considerable research effort is also directed to improving the current means of fertility control which are now available and make up the "Fourth Tier" of technology.

Incremental improvements in current means are sought which relate to some of the following characteristics:

- (a) Improved convenience for the individual;
- (b) Simplicity of use;
- (c) Attractiveness and appeal of the product or method;
- (d) Freedom from side effects and increased safety;
- (e) Effectiveness - relatively few failures;
- (f) Low cost - simple and cheap to manufacture and distribute;
- (g) Cultural acceptability;
- (h) Decreased reliance on highly skilled medical practitioners;
and,
- (i) Improved practicality in family planning programs.

Of these characteristics, undoubtedly the most important needed improvements for use in less developed countries are related to personal acceptability, suitability for use in LDC family planning programs, and effectiveness under use conditions. Although safety is always important, in less developed countries the therapeutic ratio (the risk versus benefit) of all currently used means of fertility control is highly favorable because of exceedingly high maternal mortality rates - up to 500/100,000 live births.

Methods receiving attention in A.I.D.'s program include the following:

Oral Contraceptives - The most revolutionary development in obstetrics and gynecology during the last two decades has been the introduction and widespread use of oral contraceptives throughout the world. Although often disparaged for its imperfections, the Pill remains a tremendous advance toward womankind's ancient goal of a completely effective and coitally independent means of preventing unwanted pregnancy.

It is estimated that more than 50 million women are currently using oral contraceptives -- approximately 10 million in the United States, 20 million in developing countries other than China, and 20 million in the People's Republic of China.

Wherever oral contraceptives have been made available, their use has increased rapidly and progressively.

Despite a flurry of alarmism concerning the safety of oral contraceptives, mainly generated in the U. S. and Britain, use of oral contraceptives is increasing rapidly in developing countries. During the last 2 years, with help from the IPPF and other organizations, A.I.D. has developed a standard package, each containing three monthly cycles estrogen/progestin tablets plus seven iron tablets, which appears to be well accepted.

The great acceptability and success of combined oral contraceptives in all countries where they have been made readily available, and the lack of similar ongoing successful application of other steroidal contraceptives when administered by alternative routes and schedules, makes it unlikely a major improvement in the application of steroidal substances for control of fertility will be forthcoming. Therefore, A.I.D. has confined its research efforts to studies of safety and side effects of steroidal contraception in developing countries. Since fiscal 1970, \$2.1 million has been obligated to study health effects of oral contraceptive use in developing countries.

Clinical Means - Although fertility control methods which require clinical application are necessarily somewhat limited with respect to the speed with which they can be made available throughout developing countries where the ratio of clinics and clinical competence to population is very low, they are nevertheless very important for two key reasons: (1) the long duration of protection afforded by sterilization and intrauterine contraception; and, (2) the ability to exercise hindsight for the control of fertility by abortion.

Also, because demand for pregnancy termination and female sterilization is intense wherever it is made available, skilled clinicians with adequate equipment often market these services, have a self-interest in their promotion, and, therefore, provision of such services is not necessarily dependent on government financing.

Despite considerable research during a half dozen years, progress toward perfection of intrauterine contraception has been slow. Of the innumerable devices of plastic, metal and fiber which have been "invented" and tested, few, if any, have demonstrated durable advantages over the Lippes Loop. Earlier enthusiasms for copper bearing IUDs and a variety of plastic shapes have been tempered by increasing experience and increased awareness of a number of practical limitations to their use.

Recently, Battelle Memorial Institute, with A.I.D. support, has produced a pleated plastic membrane IUD. A number of clinical trials currently in progress in several countries have indicated that this relatively soft and flexible intrauterine membrane can be worn with remarkably little discomfort and is rarely expelled; but its effectiveness in preventing pregnancy remains uncertain.

Experience with various IUDs in many countries suggests that an IUD which produces a somewhat restless and therewith uncomfortable and sometimes bleeding uterus may be more effective for prevention of pregnancy than an IUD which causes little change in uterine dynamics. If so, further progress toward improved intrauterine contraception will be difficult. Yet it remains a challenging field of research.

If and when an IUD is produced which can be comfortably worn, causes little bleeding, is rarely expelled, and is virtually entirely effective in preventing pregnancy, then intrauterine contraception would become an important means of fertility control. But, up to the present, too great dependence on intrauterine devices has proved a false start for many programs.

Sterilization - Despite considerable research aimed at improvement of male sterilization, no really important improvement has been attained during the last decade.

Very important advances, on the other hand, are being achieved in the technology of female sterilization. Previously considered a difficult and dangerous procedure requiring expensive hospitalization, female sterilization is now being done as a low cost outpatient procedure by any of several methods.

Recent A.I.D. sponsored development of single aperture laparoscopic sterilization with tubal (Hulka) clips or rings (Yoon) now permits female sterilization to be done under local anesthesia and on an outpatient basis while avoiding the two main hazards of laparoscopic female sterilization -- general anesthesia and electrocautery.

Clinical trials with these methods are now in progress in several countries, e.g., the United States, Britain, India, Thailand, and Singapore. As results of additional field trial experience become available, A.I.D. will apply knowledge gained to perfect specifications for laparoscopes, and then purchase laparoscopes in considerable number for delivery to developing countries.

Experimental work is under way to develop transcervical sterilization methods which would eliminate the need for an operation. The most promising report of these to date is the work by Zipper, using transcervical infusions of chelating agents and quinacrine. The reliability of these methods to date approaches 90 percent with two infusions; this is encouraging but still inferior to the surgical techniques. A.I.D. is sponsoring new studies which seek to use GRF tissue glues with quinacrine to eliminate multiple infusions.

Preliminary reports of the use of transcervical cryosurgery to ablate the endometrium, thereby causing "end organ" failure and sterilization appear moderately promising.

Male Sterilization - Considerable work is underway on male chemosterilants and more reversible surgical techniques of male sterilization including use of clips, testicular implants, intravasal filaments, intravasal valves, etc. None of these techniques are presently advanced enough to know their eventual utility for fertility control programs. A.I.D.-sponsored studies have sought a more reversible means of male sterilization and simplified means of permanent male sterilization for field use.

Local Methods - Rapid worldwide increases in venereal diseases have been documented by the World Health Organization, and both WHO and the Pan-American Health Organization have received a steady increase in requests to combat the problem.

Availability of an agent effective against venereal and other genital tract diseases, as well as against unwanted pregnancy, would advance both health programs and family planning programs and could be distributed at both facilities. Such an agent would be especially useful for women in primitive conditions where clinical methods of contraception and treatment facilities are not available.

An A.I.D.-sponsored research program at the University of Pittsburgh is working to develop a vaginal foam with both contraceptive and disease prophylaxis properties. Several promising compounds have been identified in laboratory studies and clinical trials of the "pro-con" agent are in progress.

(3) Field Studies

To improve currently used means of fertility control and to evaluate fertility control methods which may have differing efficacy and risks associated with them when used in the less developed countries, a major component of the A.I.D. research program is collaborative and comparative clinical trials of new methods. The focus of this effort is the epidemiologic evaluation of the success and performance characteristics of these methods under use conditions in the field by a network of collaborating investigators. These field studies have also made it possible to carry out double blind trials of new methods in the same clinic setting.

Such field studies are based on the premise that:

"to maximize the speed of improvement in the knowledge and development, in a chosen field it is essential to establish a system which facilitates collection of relevant available knowledge and technology, obtains rigorous measurement of the key variables, selects those technological varieties with preferred outstanding characteristics, and permit the combination of improved technological varieties to effect general improvement during the subsequent developmental generation(s)."

Beginning in fiscal 1967, A.I.D. supported the development of the International IUD Program of the Pathfinder Fund. This \$1.5 million field study of IUD performance characteristics has provided high quality comparative data from 40 countries. Uniform records and centralized data processing have allowed the determination of which performance patterns are related to IUD's user and clinic characteristics. For example, the highly important category of removals because of bleeding or pain has been shown to be highly related to individual clinics providing contraceptive services.

To extend the availability of a clinical network for field trials, an International Fertility Research Program (IFRP) was initiated in fiscal 1971. Since that time a total of \$9.1 million has been provided to the IFRP to support conduct of collaborative field trials of new IUDs, sterilization techniques, pregnancy termination techniques, prostaglandins, and pharmacologic contraceptives in many countries.

BIRTH CONTROL TECHNOLOGY AND IMPLICATIONS FOR FAMILY PLANNING PROGRAMS*

TECHNOLOGY TIERS	ADVENT OF METHOD	METHODS GENERALLY AVAILABLE	FAMILY PLANNING PROGRAM NEEDS
5	1970s?	METHODS LISTED BELOW PLUS: "A NON-TOXIC AND COMPLETELY EFFECTIVE SUBSTANCE OR METHOD WHICH WHEN SELF-ADMINISTERED ON A SINGLE OCCASION WOULD ENSURE THE NON-PREGNANT STATE AT COMPLETION OF A MONTHLY CYCLE."	MINIMAL REGULATION OF SEXUAL ACTIVITY. REDUCED NEED FOR EDUCATION. MAIN EMPHASIS ON ENSURING AVAILABILITY OF CONTRACEPTIVES AND POST CONCEPTIVES THROUGH MEDICAL AND NON-MEDICAL FACILITIES
4	1970s	METHODS LISTED BELOW PLUS LEGAL SURGICAL ABORTION.	SLIGHT REGULATION OF SEXUAL ACTIVITY. LESS EMPHASIS ON EDUCATION. MAIN EMPHASIS ON PROVISION OF CONTRACEPTIVE SERVICES THROUGH MEDICAL AND NON-MEDICAL FACILITIES AND ABORTION SERVICES THROUGH MEDICAL FACILITIES
3	1960s	METHODS LISTED BELOW PLUS ORAL CONTRACEPTIVES AND INTRAUTERINE DEVICES.	SOME REGULATION OF SEXUAL ACTIVITY; CONTINUED EMPHASIS ON EDUCATION AND PROVISION OF CONTRACEPTIVES AND FAMILY PLANNING SERVICES THROUGH MEDICAL AND NON-MEDICAL FACILITIES.
2	BEFORE 1960	METHODS LISTED BELOW PLUS CONDOMS, DIAPHRAGMS, VAGINAL CHEMICALS, RHYTHM, AND SURGICAL STERILIZATION.	CONSIDERABLE REGULATION OF SEXUAL ACTIVITY; EMPHASIS ON EDUCATION AND PROVISION OF MATERIALS AND SERVICES THROUGH MEDICAL AND NON-MEDICAL FACILITIES
1	BEFORE 1870	ABSTINENCE, COITUS INTERRUPTUS, DELAYED MARRIAGE AND NON-MARRIAGE, CRUDE VAGINAL BARRIERS (E.G., SPONGES) DOUCHING, AND ILLEGAL ABORTION.	STRICT REGULATION OF SEXUAL ACTIVITY. EMPHASIS ON EDUCATION.

© RAVENHOLT, R.T., FIO-RON, P.T., SPEIDEL, J.J.
USE OF ORAL CONTRACEPTIVES: A DECADE OF CONTROVERSY
INT. J. GYN. OBST. 8:941, NOVEMBER 1970.

Question 19: What has A.I.D. done to improve the efficiency and effectiveness of family planning delivery systems?

Response: The most effective family planning programs make all effective means of fertility control readily available -- 1) information, 2) oral contraceptives, 3) condoms, 4) intrauterine devices, 5) sterilization and 6) abortion.

But most family planning programs fall far short of offering this entire set of means, and therefore are much less effective than they could be.

The Office of Population has persistently worked toward the goal of full availability of these means (though since FY 1974 the Antiabortion Amendment to the FAA has inhibited action on abortion services).

This Office has given particular attention to strengthening the strategy of family planning programs, seeking to bifurcate the program into two major actions: a) A non-clinical program to achieve country-wide availability of information, oral contraceptives and condoms in every village as quickly as possible, and b) a necessarily slower-paced action to make clinical family planning services much more generally available.

AID action to support family planning programs along these lines has included far sighted purchase of massive quantities of contraceptives, the training of thousands of selected clinicians in Advanced Techniques of Fertility Management, and the development and purchase of large quantities of surgical equipment -- laparoscopes, Minilaparotomy Kits, Menstrual Regulation Kits (1973), IUD Kits, etc.

AID's unique capacity to rapidly translate latest research findings into large supplies of useable equipment which together with training, leads to widespread field action -- sometimes within months -- has revolutionized the content and strategy of many family planning programs.

Operations Research - To strengthen program action AID has developed a strong operations research capability. Increasingly the Office of Population is emphasizing direct action to test the extent of demand for contraceptives among poorest groups in selected countries. Only in the context of availability can one truly measure the extent of demand for each and all means of fertility control. And the exact nature and extent of availability is highly determinative of utilization patterns.

During the 1960s contraceptives were usually available from only a few hundred or few thousand family planning service points in each country. Now a number of countries, such as Pakistan, Indonesia, Thailand and Colombia, are making them available through tens of thousands of village shops, at negligible prices.

In many developing countries, especially those in Asia, the family planning infrastructure is well established and the full spectrum of fertility regulation methods is available. There are, however, numerous economic,

administrative, geographic and cognitive barriers which restrict this availability. In many programs, people still must pay for contraceptives, wait in long lines, fill out long forms, receive services only during restrictive hours, and travel long distances. In addition, many persons are not aware of the services that are available and/or have inaccurate information about specific fertility regulation methods. The general objective of these action research projects is to develop delivery systems that eliminate or minimize such barriers, thereby making fertility regulation methods truly available. These systems must be cost-effective and have the potential for replication by the host countries.

During the decade 1965-1975, AID has provided more than \$20 million for over 75 technical assistance and operational research projects in 20 countries in Africa, Asia and Latin America to seek new knowledge and improved methods for delivery of family planning services.

The Population Council has received AID assistance to conduct research on the impact of a demonstration postpartum family planning program in selected maternity hospitals in more than 15 countries. Areas of investigation have included the extent of participation, age-parity patterns, characteristics of acceptors, and measurements of cost and of cost-effectiveness.

Pilot studies on the use of various fertility control methods, development of improved service statistics systems and testing of mobile clinics and other delivery systems have been carried out in India, Pakistan, Turkey, the Philippines, and in other Asian, Caribbean, and Latin American countries.

On an operations research basis, AID has also moved to test demand for and utilization of contraceptives when these are maximally available, when "get acquainted" supplies of pills and condoms are delivered to each household.

Studies to test the feasibility and effects of household delivery of contraceptives include the following:

Population/Family Planning Research in the Middle East, American University in Cairo. Two distribution systems are being tested in both rural and urban settings. The first distribution system entails a household canvass during which pills or condoms will be offered free to residents. In addition, back-up IUD, sterilization and abortion services (by GOE) are available for persons not desiring pills or condoms. (These back-up services are funded with local funds.) The other system distributes pills and condoms through group meetings of neighborhood women. If this year-long demonstration is successful, the project could be continued.

Korean Saturation Project, East-West Center. This project is still in the proposal stage. It is now planned to saturate a study area with pills and condoms through village-wide household canvasses or group meetings. After this initial canvass/meeting, resupplies can be obtained from a village depot.

The study area has a population of approximately 150,000 people. There will be a control area which will not receive the saturation. There will be an intensive cost analysis of the saturation project, which will also provide back-up services offering other fertility regulation methods. In addition to the cost analysis, there will be three surveys -- before, mid-point, and after -- done in each area. The project, if approved, will cover a five-year period.

West Java OC Distribution Project, West Java, BKKBN. This project began in June 1974. It is a small demonstration project designed to test four oral contraceptive distribution schemes against a control area to ascertain the feasibility and effectiveness of oral contraceptive home resupply. The four schemes are: (a) use of fieldworkers to provide home supply of OCs; (b) use of fieldworkers and village depots to provide home supply of OCs; (c) use of selected continuing OC users to provide OC home supply; and (d) use of selected continuing users and village stock depots to provide home supply. It should be noted that this project is currently concerned only with resupplying acceptors. Discussions are now being held with USAID/Jakarta to develop parallel schemes which offer the initial supply of OCs at the household. It is likely that these schemes can be implemented this fiscal year.

Barrio Resupply Project, POPCOM, The Philippines. The Barrio resupply project is just beginning. Under this project, clinic pill acceptors can be resupplied by paying 35 centavos per cycle to unsalaried Barrio officials. A protocol for this project has been submitted to USAID/Manila suggesting that a household canvass be combined with the resupply project and that the resupply costs be eliminated. It is not certain if these changes can be effected.

Taiwan Oral Contraceptive Distribution Project, The Johns Hopkins University. The project's objective is to test the hypothesis that if contraceptives are made available to women of childbearing age, most will start contracepting and fertility will decline. Twelve study townships and 12 control townships are used in the project. Each study area is matched with a control based on characteristics of urbanization, fertility, family planning practice and other socio-economic characteristics. One township in each of the 12 matched pairs was selected randomly to be a study area. Family planning fieldworkers in the study areas distribute six cycles of oral contraceptives and six dozen condoms to each post-partum woman at three months after delivery. In control areas the routine family planning program efforts are continuing. A baseline survey of client characteristics has recently been concluded and a follow-up survey will be conducted at the end of the project in mid-1976. Evaluation measures will include rates assessing women contacted, contraceptive acceptors, contraceptive use, abortion, length of open interval, various fertility measures, maternal mortality rates, infant mortality rates, and costs per acceptor and per birth averted. Attempts are now being made to expand the family planning activities to all at-risk women, rather than just post-partum women.

Field Studies of Contraceptive Studies in Rural Bangladesh, The Johns Hopkins University. An epidemiologic study has been approved to study the side effects and acceptability of various contraceptive methods in the study population established in Matlab Thana, Comilla District, by the Cholera Research Laboratory. It is planned that this study will be expanded to assess the demographic effects of one or more delivery systems designed to provide the population with modern fertility control techniques. The study population of 220,000 villages has had censuses taken in 1966, 1968, and 1970 followed by daily house-to-house surveillance and registration of all births, deaths, and migrations. Each individual is assigned a unique census number permitting exact identification and virtually complete follow-up in the field for medical and vital event record linkage studies. Details of the study design and methods of fertility control have yet to be finalized, but this area is unusual in that accurate demographic data are available and continue to be collected.

Although this action only began in 1974, it is already apparent from the studies in EGYPT, Taiwan, Korea, Bangladesh, Indonesia and Nepal that such home delivery of contraceptives is feasible and thereby family planning programs can achieve sudden increase in availability and utilization among the most needy -- the poorest, least literate, most shy, and least experienced populations -- which were largely untouched by fixed point of service programs.

This evidence to date suggests that before going "beyond" family planning, family planning programs should be more fully implemented. Much of the limitation of success of current family planning programs is a result of restrictive policies limiting availability of more effective technologies. The cost of alternative strategies requiring fundamental social change and economic development is seldom considered and their effectiveness remains unproven. This is not to say that the called-for social changes are not desirable for many other reasons -- and that they may contribute to fertility decline. However, their impact on fertility is likely to be less powerful, less direct, and more costly than family planning programs.

A recent review of world fertility trends by Dr. R. T. Ravenholt, Director of AID's Office of Population, and Dr. John Chao of the U. S. Bureau of the Census, compared fertility changes during the decade of the 1960s in 12 developing countries with relatively vigorous family planning programs for part of all of the period (Figure 2)* against changes in 12 countries without vigorous family planning programs for most of the period (Figure 3)*. A rapid fertility decrease occurred in the 12 countries with implemented, relatively vigorous family planning programs. Conversely, in 12 countries without vigorous family planning programs, fertility did not decline despite considerable economic and social improvement in a number of these countries which included Brazil, Mexico and Kuwait, all of which experienced very high rates of economic growth during the 1960s.

*See page 85

**See page 86

These latest demographic data challenge the hypothesis that only antecedent social and economic development can produce a decline in birth rates. The authors concluded that "...in the absence of family planning programs and ready access to improved means of fertility control, these socio-economic gains were not translated into lower birth rates."

Data from numerous knowledge, attitude and practice (KAP) surveys of fertility related behavior also reveal a large reservoir of demand for fertility control among people who have not yet gained access to effective means.

The most successful national family planning programs have benefited from an integration of research activities with ongoing programs. These programs have provided important information about user characteristics, what birth control methods they employed, and their rates of acceptance and continuance as measures of program impact and success. These operational research programs serve to identify and study problems and provide essential information to program administration, allowing changes and modifications in programs to insure their success.

Research is needed to determine the best methods of educating, communicating with and educating people to use available family planning services. Study of factors ensuring continuance as well as initial acceptance of family planning services are important, as are studies of fertility acceptors, non-acceptors and terminators. Personal relationships with clinic personnel or field workers and side effects of contraceptives seem particularly important to acceptance and continuing use of contraception. More studies of these relationships are needed. Innovative studies with respect to determinants of fertility control behavior involving house-to-house visits by field workers, popular mass media, peer group leaders and other approaches require trial and evaluation.

Less developed countries typically have relatively little trained manpower and weak administrative, transportation and communications systems. The conditions call for action research on optimal organization and administration of family planning programs, focusing particularly on target population locations, proper location and make-up of services, linkage of family planning and other services such as commercial systems or health services, how to provide family planning for rural populations, and other organizational problems relating to provision of services. Staffing needs of service programs dictate research into manpower problems and the development of new training methods for family planning workers.

Investigation of program impact, including relative cost effectiveness of various delivery patterns, developing simplified and accurate means of keeping service statistics, new approaches to measuring impact of service programs on fertility, better measures of the demographic effectiveness of specific contraceptives and reasons for departure from theoretical effectiveness are some of the areas where research is needed.

Question 20: How does A.I.D. ensure that research findings are utilized in LDC action programs?

Response: Unless research findings are put to use in developing countries, the conduct of the research will not have achieved its purpose. A key factor fostering timely utilization of new information is the rapid provision of up-to-date results of research to LDC individuals and programs. Therefore, to strengthen population/family planning programs and policies in LDCs, a program has been established for the rapid collection, analysis, and dissemination of all available relevant information on contraceptive devices, techniques and equipment, family planning delivery systems, and current laws and policies worldwide. Because of the rapid advances of biomedical technology in the field of fertility control and the wide variety of family planning delivery methods now being implemented, there is an important need for timely, accurate and complete information on these particular areas. In order to accomplish this objective, in June 1972 the Agency initiated the Population Information Program (PIP). (See page 90)

This project is gathering, updating, analyzing, and abstracting information and data on worldwide research in the areas of:

- (a) Steroidal contraceptives
- (b) Intrauterine devices
- (c) Female sterilization
- (d) Male sterilization
- (e) Rhythm
- (f) Pregnancy termination
- (g) Prostaglandins
- (h) Barrier methods (i.e., condoms, foams, spermicide)
- (i) Law and public policy
- (j) Family planning programs

This information is made available through a computerized data base and a series of Population Reports published at least monthly and distributed worldwide to policy makers, physicians, researchers, health professionals, population experts, and others concerned with family planning programs in developing countries, as well as to major health training and medical education/information centers. To date 31 Population Reports have been prepared on all aspects of fertility control mentioned above. About 85,000 copies of each Population Report are being distributed to LDCs in four languages (English, French, Spanish and Portuguese) utilizing a computerized mailing list capable of distinguishing the above mentioned target audiences. The computerized data base includes approximately 10,000 abstracts of biomedical and scientific articles which are abstracted and indexed for rapid computer retrieval.

Other ways of ensuring utilization of research findings include: sponsorship of conferences, publication of articles and monographs, training of selected LDC participants in research programs, and the provision of assistance to LDC investigators to write and publish their research findings. The Program for Applied Research on Fertility Regulation and the International Fertility Research Program have been among the most active in these activities.

Question 21: What do you consider to be the role of the grantees in achieving the overall objectives of Goal Four?

Response: Through the grant mechanism, the family planning services goals of wide scale delivery of standardized contraceptives and field testing of innovative methodologies via programs such as church affiliated hospitals, voluntary community groups, and teaching hospitals are enlarged beyond those possible if bilateral arrangements were the only channel available. Many of the programs initiated via grantees have been absorbed or copied later by host governments. Without the grantee mechanism, population programs in most of Latin America and Africa would not have gotten off the ground. Grantee intermediaries enable the U. S. to provide resources to P/FP priority programs in countries where P/FP is too sensitive for direct government participation. At the present time, grantees are doing the majority of the pioneering work in non-clinical distribution, sterilization and clinical use of paramedicals. In some cases, the bilateral and grantees' efforts are complementary, in others they are in healthy competition (e.g., to demonstrate cost effectiveness) and almost nowhere are the services overlapping.

Question 22: What is the basis for A.I.D.'s planning, programming, procurement and distribution of contraceptives?

Response: A first need of every family planning program is an adequate working supply of contraceptives. Only in the context of availability can demand for each means of fertility control be reliably measured. Experience in many countries has now demonstrated that if oral contraceptives are readily available at the village level more than 10 percent of women of reproductive age will use them; and if condoms are likewise readily available more than 5 percent of males of reproductive age will use them. Hence, the United States Agency for International Development and public health officials calculate that appropriate initial supply goals for a program's first year of operations are a year's supply of oral contraceptives for 10 percent of the women aged 15-49, a year's supply of condoms for 5 percent of the men of equivalent age, and a year's supply of spermicides for one percent of the women aged 15-49. In a country of 100 million people, for example, the required initial order of oral contraceptives is:

100,000,000 (total population) x 20 percent (approximate percentage of women aged 15-49) x 10 percent (goal for 1st year) x 13 (cycles per woman per year) = 26 million cycles

At a cost of \$0.20 (US) per cycle, this would amount to \$5.2 million (US) for the first year. A similar supply should be ordered for the second year, and thereafter orders should be adjusted to the rates and trends of utilization.

The initial order of condoms for the same population is:

100,000,000 (total population) x 20 percent (approximate percentage of men aged 15-49) x 5 percent (goal for 1st year) x 100 (condoms per man per year) = 100 million condoms

At a cost of \$0.03 (US) per condom this would amount to \$3 million (US) for the first year.

These requirements are then forwarded to A.I.D./Washington for review on a routine basis. Using data periodically received from all programs regarding usage, number of acceptors, warehouse stocks, pipeline, etc., A.I.D./Washington concurs in or adjusts the project's estimated quantities. This figure is then consolidated and used as the basis for A.I.D./Washington entering into a contract through GSA with U. S. industry. Procurement of our total requirement is accomplished through open competitive bidding.

Distribution is then initiated on a monthly basis by letter request from PHA/POP to the authorized agent (GSA), who issues the purchase orders to the manufacturer and arranges for shipment.

Upon issuance of the bill of lading, PHA/POP advises the project officer, (bilateral programs) or grantee that shipment has been made and provides to them the definitive shipping information along with a copy of the bill of lading. The Mission is required to acknowledge receive of the shipment under the bilateral program.

Contraceptives Purchased by A.I.D.

Since removal of contraceptives from AID's list of proscribed commodities, in May 1967, AID has purchased the following quantities of contraceptives:

OFFICE OF POPULATION
OBLIGATIONS FOR COMMODITIES
BY TYPE

<u>FY</u>	<u>TOTAL</u>	<u>ORALS</u>	<u>CONDOMS</u>	<u>IUDS</u>	<u>MED KITS</u>	<u>AEROSOL FOAM</u>	<u>OTHER TYPES</u>
1968	\$ 1,059,346	620,144	323,218	532	17,702	-	97,750
1969	\$ 4,094,873	840,561	2,711,390	117,489	94,581	188,949	141,903
1970	\$ 4,040,233	2,198,753	177,142	238,867	376,487	1,025,440	23,544
1971	\$ 3,493,447	2,016,651	567,486	389,640	158,787	303,001	57,882
1972	\$ 6,870,543	4,612,194	275,950	483,865	775,860	567,529	155,145
1973	\$ 35,904,266	26,698,007	7,503,095	754,804	506,020	325,958	116,382
1974	\$ 20,833,750	14,644,800	3,076,800	527,223	1,837,023	585,318	162,586
1975	\$ 23,039,429	10,370,400	10,352,064	317,906	1,459,432	483,746	55,881
TOTALS	\$ 99,335,887	62,001,510	24,987,145	2,830,326	5,225,892	3,479,941	811,073

Question 23: How do you respond to complaints from the Missions and LDC governments with respect to technical problems confronted in the development of the programs?

Response: The Family Planning Services Division responds to technical problems in several ways:

1. By Communications.

(a) Cables sent out on a regular basis or on a priority (urgent) basis are the basic form of communication.

(b) Letters sent by diplomatic pouch are used frequently.

(c) Phone calls to Missions are made for immediate questions and answers when this is essential.

2. By Visits

Field visits by members of the staff of the Family Planning Services Division are a regular aspect of work in this Division. One purpose of these visits is problem solving. Other purposes include anticipating future needs and gathering pertinent information.

Visits by members of other Divisions of the Office of Population, traveling for other basic purposes, are used by Family Planning Services Division as opportunities to obtain reports on particular technical problems in selected countries.

3. Use of Contractors.

The Family Planning Services Division monitors three contracts which can be effectively used for problem solving these include:

(a) The American Public Health Association (APHA) contract which provides the capability of fielding consultants in various technical fields on short notice in response to requests from host countries transmitted by the Mission to AID/Washington.

(b) The Center for Disease Control (C.D.C.) contract by which the services of the Family Planning Evaluation Division of the C.D.C. in Atlanta are made available to the Family Planning Services programs in data gathering program evaluation, distribution of commodities and general problem solving.

(c) The Management Sciences for Health (M.S.H.) contract which uses the feedback of important information to help solve family planning program problems. Personnel under this contract are available for short or long term overseas visits in response to field requests. They have special interest in problems concerning logistics of contraceptive commodities

Question 24: Do you feel that the grantees' relationship could be made less stringent or is it necessary to maintain tight controls to assure compliance?

Response: There is no standard language which governs the degree of A.I.D. monitorship of a grantee. In part, it is determined by the terms of the grant and in part by the length of time the grantee has been operational and, of course, in part by the individual personalities involved on both sides of the equation. In every case, the best type of relationship is one where a feeling of professional confidence is established. When this occurs, the grantee is happy to be guided by A.I.D. in matters of political sensitivities, Agency priorities, U. S. A.I.D. jurisdiction and potential audit problems. The A.I.D. grant monitor in turn appreciates the professional expertise, objective point of view and creativeness of the grantee. In brief, the relationship at its best becomes a truly collaborative one which benefits both parties and the host countries to be served.

The question suggests that without tight controls, grantees would not comply with the terms of the grant. This is not the case. Grantees are generally philosophically in agreement with the purposes of their grant and, of course, wish it to be continued with further funding. Without the monitorship and internal coordination within, grantees would lose time, energy and funds in initiating overlapping projects and projects in countries which fall at the low end of A.I.D. priorities. A.I.D. staff need to monitor on a continuing basis in order to be fully informed to make future programmatic decisions and to respond to Congressional inquiries.

There are, of course, delays which have occurred because A.I.D./Washington insists upon clearing sub-projects with the field, but these instances have been greatly reduced. In fact, of late, it is more frequently A.I.D./Washington which finds it necessary to spur the grantees into timely submission of sub-projects, particularly the renewal of sub-projects.

The maximum amount of funds allowed for local expendable supplies needs to be increased, but that is a matter of grant terms, not monitorship.

In brief, there is no general substantial evidence that the current practice of continuing monitorship by A.I.D. is resented by grantees or harmful to grant results.

Question 25: How do you test the cost effectiveness of various delivery systems in LDCs (commercial, national, integrated, village distribution, non-clinical)?

Response: The cost-effectiveness of various family planning delivery systems in LDCs is difficult to measure and equally difficult upon which to draw comparisons. A program which is integrated with the health delivery system, for instance, utilizes an existing infrastructure, thus reducing start up costs and continuing personnel costs. On the other hand, because most LDCs have a limited health structure, the integrated approach's effectiveness is reduced because a large percentage of the population has no access to the limited services. Commercial systems, which are initially subsidized, have the potential of producing an excellent cost-effectiveness ratio since they are based on the assumptions that private enterprise can develop broad-based, effective distribution systems backed up with persuasive media campaigns, and do this in the long run at a cost much lower than governments. The cost-effectiveness of such systems can diminish because the initial start-up costs can be steep and because the local economies of rural populations may not be able to pay the costs of nonsubsidized contraceptives (and their delivery) to make the programs eventually self-sustaining. "Village" distribution systems, many times referred to as community based distribution programs, may offer the best models in terms of cost-effectiveness. These models deliver contraceptives to the people in the most direct way possible. They can be implemented nationwide, thus avoiding the intrinsic problems of the clinical and health systems, and distribution overhead costs can be relatively lower than strictly commercial systems. Their main disadvantage is that, in the near future, at least partial subsidization will be necessary.

Two main elements contribute to the composition of determining the cost-effectiveness of delivering family planning services:

1. The cost of delivering services to the totality of the target population
in relation to:
2. The number of births averted by these services.

Because every country has different legal, cultural, and political variables which impinge on any given delivery system, and because western economic indicators (or equivalent indicators) to determine the cost-effectiveness of "social" programs many times simply do not exist, it is truly difficult to say that the mix of programs in country Y has a better cost-effectiveness ratio than the mix in country Z. Although country programs have been able to collect data on the costs of providing services, because different and, at times, incomplete sets of input data are used, a direct comparison between country programs cannot be validly made. And until demographically controlled surveys are conducted after these services are in place for a number of years, the number of births averted in relation

to services rendered cannot be calculated. Work is being done in this area, however, and data will be available in the coming years. The Office of Population made an early attempt to obtain data on cost-effectiveness of various systems and fertility techniques through such contacts as with Professor Warren Robertson of Penn State University. However, it became clear that this was a fruitless undertaking until there was better data and there was the benefit of a longer time frame in which to measure these tests.

Increasingly we are measuring cost effectiveness by the amount of international population program assistance required on a per capita basis to enable an LDC to become self sufficient in the control of its fertility. And we can now begin to compare such costs among countries we are assisting. For example, in Indonesia, international population program assistance over the decade of time required to enable Indonesia to assume this responsibility (1968-1978) will probably total less than 75¢ per capita; in the Philippines the per capita cost will be about \$1; and in Tunisia and in most Central American countries where family planning was integrated with broad guage health programs, it will be several dollars per capita.

In general, the cost per family planning acceptor or user is greater if family planning monies and services are integrated with many other health services. But integration may be valuable if the health action that is combined with family planning is sufficiently simple and inexpensive that it can be extended country-wide.

We are now moving to develop an Integrated Rural Delivery Service to deliver contraceptives and selected health medicaments to the rural poor. (See memorandum: "A Plan of Action for Achieving Village and Household Availability of Contraceptives and Selected Health Medicaments throughout the Developing World by 1980"⁴; and the Population Report: "Contraceptive Distribution; Taking Supplies to Villages and Households"^{**}

*See pages 91-97

**See pages 98-117

Question 26: Summarize the rationale for actions taken to develop the capacity of LDC family planning programs to effectively use information, education and communication to recruit and retain acceptors, to generate a willingness to have small families, to generate understanding of and support for population/family planning programs.

Response:

Problems and Background

Effective population action, worldwide and in individual countries, depends upon public and individual understanding of the necessity for action coupled with adequate education/information about birth control methods and available program services. Therefore, a major population program assistance goal is "the development of adequate systems for delivery of information/knowledge" about population/family planning.

Among relevant problems which impede population programs across-the-board are:

- (a) The traditional pattern of large families in most LDCs. This push toward high fertility often is reflected in public policies and restrictive laws;
- (b) Wide ignorance of individuals and families regarding contraceptive methods which would permit them to limit the size of their family;
- (c) Inadequate means of effectively informing key groups and the public about family planning services available. Even in the active programs, field workers are numbered only in the thousands whereas populations are numbered in the millions and hundreds of millions. Moreover, most LDCs have had little, if any, experience in conducting effective education and promotion for mass participation programs.

The urge to action is often not strong enough on the part of women or men to actually carry out family planning and contraceptive methods, even when the family planning message is accepted and the necessary supplies, methods, and services are available.

Information/education (IE) assistance aims specifically at helping the LDCs develop or improve their own systems for effective delivery of information/knowledge in the population field. These systems must be of varying types. Messages must be delivered in different ways depending on the IE resources available, the stage of policy/program development, the cultural and social climate, the target audiences to be reached, the channels and media to be used, and other factors, including the needs imposed by program activities.

Family planning and its IE support require sensitivity, skill, and care in presentation and use. It is essential that communications in the population field reflect the genuine concerns of the groups providing the messages -- rather than being transmissions of messages of a foreign government or other outsiders.

The adoption and sustained practice of family planning depends on four essentials: new knowledge; new attitudes; new services; and, new resources.

Change in the behavior of five action audiences in the developing countries is essential to the success of population family planning activities. The IE objectives relevant to this change of behavior and the IE functions that can affect this change are outlined below, with respect to priority developing countries.

Objective I:

To persuade the Reproducers and acceptors "action" audience to adopt and practice effective means of family planning in sufficient numbers to rapidly slow population growth and improve the reproductive well-being of people.

IE Functions:

1. Generate awareness of the possibility of family planning.
2. Inform potential acceptors of where and how to get modern means of family planning.
3. Provide basic knowledge about reproduction and how it can be limited.
4. Provide value knowledge by which advantages of family planning can be weighed with attention to family aspirations, health, and economic factors.
5. Teach how-to-do family planning with specific methods.
6. Deal with fears, rumors, and other inhibiting information components.
7. Use highly creditable message sources with respect to competence and reliability as perceived by receivers.
8. Generate positive social pressures for family planning by group approaches to make family planning socially acceptable and by ego-involvement of individuals and groups concerned.
9. Employ many organizations and channels to present the value of family planning.

Objective II:

To persuade the Controllers of Policy "action" audience to adopt and/or provide increasing resources to support the effective implementation of population policies that include family planning and are directed

at establishing stable and sustainable ratios between population, food, natural resources, and other variables.

IE Functions:

A. In countries with population policies:

1. Inform leaders about family planning programs
2. Build the will to provide resources for family planning information and services coverage for high fertility population
3. Document and propagate the story of how house-to-house and commercial distribution of pills and condoms is working in that or neighboring countries
4. Emphasize such themes as:
 - (a) Fertility control as an important and necessary ingredient if development is to succeed.
 - (b) Fertility management is essential to improve health and elevate the quality of life
5. Continue to develop population awareness in all subaudiences
6. Educate controllers in basics of population dynamics
7. Educate controllers in need to prepare the on-coming reproducers in how to manage their fertility.

B. In countries without population policies:

1. Educate in population awareness
2. Educate in population dynamics
3. Emphasize themes in 4, above
4. Educate in what family planning is and what could be done in the specific country
5. Condense, focus, translate into lay language and make widely available to the subaudiences scholarly information about population in the country, the region and the world.

Objective III:

To persuade the On-Coming Reproducers "action" audience to gain the knowledge and commitment necessary to limit their fertility to approach the replacement level in their generation.

IE Functions:

1. Develop in-school and out-of-school programs to reach increasing numbers of the six subaudiences:
 - (a) Elementary school age
 - (b) Early teens in school
 - (c) Early teens out of school
 - (d) Late teens in school
 - (e) Late teens out of school
 - (f) College and university.

2. Teach appropriate mix of four major subject matter streams:
 - (a) Population awareness
 - (b) Population dynamics
 - (c) Family planning practice
 - (d) Human reproduction and sex education.

Objective IV:

To induce the General Public to accept a commitment to rapidly slow the rate of population growth in their countries and to adopt family size norms at which they will reduce the rate of population increase.

IE Functions:

1. Generate an awareness of population as an important ingredient in what is happening to them, their communities and their nation.
2. Present the relation between food, natural resources, rising standards of living and population in their nation.
3. Present information that bears on the promotion of a small family norm for the country.
4. Provide public relations information about the population family planning program.

Objective V:

To teach the Deliverers of Information and Services to be effective, have high morale, be good communicators with their clients and the public, and create a relationship with their clients that will promote sustained family planning practice.

IE Functions:

1. Assist in interesting and recruiting suitable personnel.
2. Develop and sustain high morale and pride in family planning program service.
3. Teach people to be effective communicators, which involves maintaining good relations with clients.
4. Assist continuing training on the job to elevate effectiveness and skill with which information and services are delivered to reproducers.
5. Interpret service delivery people to the general public.

Channels through which IE works to assist country level programs.

Across the board, A.I.D. is applying about 11 percent of its resources to IE activities. These resources are moved through four channels. First, bilateral country programs to support public and private sector in-country population/family planning IE activities in 27 countries. This requires about \$2 million per year.

Appendix B

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The UNFPA supports government requested IE projects, mostly public sector, in more than 40 countries. A.I.D.-supplied money is moving through this channel at the rate of \$2.7-3.1 billion per year. Fifty-two percent of UNFPA IE money goes for family planning and 48 percent for population education in school and out.

Also, major intermediaries (IPPF, FPIA and Pathfinder) support private family planning associations, church related health and community programs, other private welfare agencies, and service projects. Through this channel the resources reach more than 80 countries at the rate of \$4-5 million per year.

In addition, interregional projects funded by PHA/POF strengthen all IE activities to reach and influence in-country action audiences at the rate of \$3-4 million per year.

Goal Five Strategies

1. To help public and private sector population family planning in priority developing countries, to develop and implement country information education strategies that involve each of the five action audiences. The objective is to achieve "knowledge availability" to match, extend, and support commodity and service availability for all acceptable family planning methods, and to achieve effective public awareness of and support for population family planning programs.
2. To organize A.I.D. staff, skills, and resources -- and those of A.I.D.'s contractor/grantees -- around a series of campaigns focusing on the IE functions which relate to the five action audiences and the various family planning modes and also to assist in providing the country's IE resources, training, and research to support Strategy 1.
3. To coordinate efforts with other donors and intermediaries to maximize the use of relevant available skills, resources, training, and research to support Strategy 1.
4. To work with and through auxiliary organizations as channels for population family planning IE to their constituencies/clients so as to contribute to developing positive social pressures for lower fertility.
5. To seek to insure that the operative population family planning agencies, organizations, and individuals throughout the LDCs receive a reliable flow of relevant, useful information and IE materials necessary for effective program planning and implementation with optimum and cost-effective division of labor among the various producers, handlers and distributors of such information and materials.

6. To be alert to ways to harness the in-country and worldwide mass media to use a series of population/family planning themes that will sharply increase population awareness and support for population/family planning programs.

Rationale for Actions Taken

The rationale for all IE actions centers on the need for locating the information/education activity within the country and adapting it to specific situations and local needs. Special attention has to be paid to the cultural and linguistic translation of messages into forms that are understood and acceptable.

Efforts through the bilateral channel are directed specifically at providing the resources needed for country IE activities.

Resources channeled through the UNFPA are primarily directed at the governmental activities of the countries, working with the health delivery systems.

IE work through the intermediaries, particularly IPPF, FPIA and the Pathfinder Fund, is based on the premise that many countries still do not have official population/family planning policies, and that in these countries only private agencies, both planned parenthood or family planning associations and those related to church and other welfare agencies, are able to inform and develop new attitudes toward family planning. But the private groups and associations also play an important role even in countries that have a population policy and a national population program, because in many instances private groups are able to pioneer in communications on population and family planning issues and thereby fill a role in controversial areas that would be embarrassing to government agencies.

The activities set up to be carried out through contractor/grantees are designed to support or supplement all the other channels of activity. They are directed at five purposes:

1. To improve and support IE country activities by supplying the necessary trained manpower and research and evaluation back up for action programs.
2. To provide information for fertile couples and country policy leaders through a series of activities in adult education, through local organizations, through the activities of home economists, and to provide motion picture films to Latin America.
3. To promote awareness of and support for family planning through the suppliers of information and service groups, with special attention to midwife activity promotion, agricultural extension, and work through pharmacists.
4. To develop population awareness and information for youth through a worldwide youth organization.
5. To produce information materials and training films that are useful in a wide variety of ways.

Question 27: What training programs in the IE area have been carried out and what are the graduates of these programs now doing in population/family planning activities?

Response:

Overview of IE Manpower Needs

IE functions at the levels where the operating programs interface with the public to be persuaded and served. Successful programs at these levels depend on capable nationals in each country. The IE personnel required is of two major types. First, leaders must have the knowledge and capability of designing strategy, planning programs, and guiding their implementation. Required are highly skilled and experienced personnel with broad training in many aspects of information, education, and communication operations. Second, there must be a cadre of media specialists and subject matter people capable of designing and producing P/FP messages and moving them through the three major modes of communicating; (1) interpersonal counselling, (2) community organization and group work, and, (3) the mass media.

When population programs began to function six to ten years ago, there were few trained people who had both the IE skills and the knowledge of P/FP to carry out these activities. And modes of reaching people had undergone considerable change. Radio had made great strides, and many receivers were in use. Most of the developing countries had also made at least a beginning with television and some of them had quite extensive networks. The print media had been steadily growing, even though in many countries, especially in rural areas, there were still large numbers of illiterates. It was apparent that with word of mouth pass-on and a growing level of literacy even in the villages, the print media could become important channels for communication with the general public.

The networks of clinics and health service delivery centers which had been developed constituted still another important channel for communicating with people about P/FP.

One of A.I.D.'s first actions in the development of effective IE operations was to examine and plan for the training of LDC people to work effectively in developing IE programs. Also, there was need for the training and integration of activities between the various intermediaries who entered the field. It was recognized that IE training should include the further development of the staffs of the intermediary organizations.

A.I.D.-Assisted Information Education Communication Training

Faced with the situation outlined above, and considering the fact that no institution existed anywhere through which to develop the knowledge and focus the training skills required, A.I.D. had to start from scratch in developing IE training. Two projects were initiated: Development of institutional capacity for IEC support of population programs at (a) the East-West Communications Institute in Hawaii and (b) the Expansion of Population Program Communications at the University of Chicago.

A. East-West Communication Institute--Honolulu, Hawaii

The program at the East-West Communications Institute in Hawaii consisted at first as a contract and a grant. The contract covered a program, now completed, to carry out a survey and analysis of IEC needs and capabilities for two groups of institutions: The major donor intermediaries, and twenty of the more important less-developed countries. The grant to EWCI was for improvement of information, education and communication activities in support of population/family planning programs, especially in Asia and the Pacific Area. This purpose is achieved through IEC training of developing country program leaders and IEC specialists, through cooperative IEC research with developing country institutions, exchange of IEC information between programs and continuing analysis of population IEC needs, structures and techniques. The EWCI project is developing relationships with a network of LDC institutions leading to their initiation of population IEC training and research through workshops, conferences, and on-site visits. The institute has enlisted some initial support from other sources such as the Ford Foundation and has obtained active cooperation from UNESCO and the UN Center for Economic and Social Information (CESI). The EWCI is seeking to develop major assistance from these and other sources over the next five years along with a scaling-down of the present A.I.D. assistance. At present A.I.D.'s grant is about 40 percent of the Center's support.

Thus far, EWCI has conducted 15 workshops, seminars, modular professional development program sessions, and conferences.

A major achievement has been the inception and development of a new approach to professional development instruction. This development responds to two major needs. First, the great variability of the backgrounds, training, and experience of the participants from a wide variety of countries and institutions. Some of these people have excellent theoretical or practical experience in some subjects with almost no knowledge in others. Even where there is training or experience in a subject matter area; the level of mastery varies widely. This makes it difficult to mount a training program that uses conventional lecture methods because some people are bored with the elementary nature of the lectures while others may be completely swamped with the

material going over their heads. Second, there is a need for all trainees to carry away with them material and a method of instruction which will make it easy for them to teach others in their home countries.

To meet these needs, a Modular Professional Development System has been created. It consists of 15 modules of guidance and self-instructional materials. Each student chooses those modules that are relevant to his need or state of learning. He works his way through them under the tutelage and general guidance of the EWCI staff. A major effort has been made to use the training sessions and field follow-up to improve the modules. An important feature is that most modules make extensive use of case histories developed on country situations. The titles of the 15 modules are as follows:

1. Fundamental human communication
2. Production
3. Low-cost technology
4. Reaching rural people
5. People and population
6. Information resources
7. Organization and management
8. Social and economic development
9. Using existing media
10. Clinic education
11. Helping people learn
12. Product testing
13. Planning
14. Beyond family planning
15. The role of the consultant

Recent field visits to persons who have completed the course at EWCI using these modular units have revealed a high degree of success in their use.

Participants and their Activities After Returning Home

Between 1970 and 1974 EWCI had 309 persons participate in the various training and conference activities. Participants included persons who were supported by a wide variety of agencies including AID, UNESCO, IPPF, Asia Foundation, World Bank, a number of individual governments, UNFPA, Ford Foundation, Population Council, World Education, Inc., and others. Two hundred and six of these individuals came from 33 less developed countries. The classification of the type of agency they came from and the job which they do is shown in the following table:

CLASSIFICATION OF EWCI 1970 TO 1974 PARTICIPANTS FROM 33 COUNTRIES BY CLASS OF AGENCY AND JOB			
<u>Type of Organization</u>	<u>Total</u>	<u>Direct Pop. IEC Job</u>	<u>Related Job in Pop. Ed.</u>
Private Population Agencies	33	19	14
Private Church and Welfare Agencies	3	0	3
Government Agencies	116	35	81
Academic Institution	31	0	31
International Agencies	91	3	16
Commercial Companies	4	2	2
	<u>206</u>	<u>59</u>	<u>147</u>

The participants came from six types of agencies. The largest number 116, came from official government agencies followed by private population agencies (33) including country family planning associations, and IPPF. A fairly large representation of academic institutions was included with 31 participants coming from this source.

A total of 59 of the participants were specifically in charge of or were active members of population IEC programs. Thirty-five of these people were from official government programs, 19 were from private.

B. University of Chicago, Chicago, Illinois

On July 1, 1971, the Social Science Division of the University of Chicago inaugurated a graduate training program for population communication under Grant AID/csd-3314. The purpose of this grant was to help the University develop, within five years, the capability of providing Master's Degree training in population IEC that would meet certain specifications.

- a. To develop a combination of classroom training and practical experience in a laboratory that would prepare graduates to be top-level administrators or technicians in their country's IEC program for population.
- b. To promote the long-term planning of IEC programs for sustaining an integrated operation, using all media.
- c. To promote a closer working relationship between the family planning programs and the media resources of each country.
- d. To conduct independent research of importance to population IEC, to train students in research methodology, and to inculcate in all students a healthy respect for field investigation and research and the practical application of findings in the IEC field.
- e. To promote the greater use of pretesting, research, and evaluation in the planning, production and correction of family planning programs.

- f. To establish at Chicago a center of professional interest in population IEC that could be drawn on as a resource for conferences, seminars, and special training sessions held at in-country locations to meet particular local needs.
- g. To establish at Chicago a corps of professionals who could visit family planning organizations in individual countries to help promote the idea of IEC with executive directors and their staffs.
- h. To publish materials in the IEC field that would be of immediate practical use to IEC programs for population in the less developed countries.
- i. To establish close collaborative ties with all other organizations engaged in training, financing, or research for population IEC on the international scene.

In developing the above degree program, The Community and Family Study Center at the University of Chicago was building upon its pioneering efforts in this field. It was among the first of the academic institutions to perceive the crucial need for Information, Education, and Communication programs for family planning and the concomitant need to train highly skilled professional communicators to plan, execute and administer those programs.

Beginning in 1963, the University began holding a series of summer workshops entitled, "Mass Communication and Motivation for Family Planning" and has continued to conduct these workshop each year since. Between 1963 and 1975 the summer "Bogue" Workshops, as they are called, have trained over 914 participants from 73 countries. This short-term training introduced the participants to the wide range of techniques and programs in communication that are available to arrive at solutions to the world population problem. Guest experts and visiting specialists were invited both from educational institutions and operating programs to supply information made more creditable by first-hand experience.

Towards the end of a decade of summer workshops in IEC, two conclusions became apparent:

- a. The high-level individuals needed to guide, plan, execute, and administer IEC programs for family planning could not be adequately trained in short-term workshops.
- b. Although it was not difficult to specify an "ideal" curriculum for training IEC professions in family planning, such a curri-

culum existed at none of the world's educational institutions and was not likely to be available in the foreseeable future.

As the Chicago training program has progressed since 1971, it has emphasized four categories under the AID grant: (1) the M.A. program in Population Communication, (2) the M.A. program in Population Education (3) the PhD training program and (4) the summer training program. The foreign students are integrated into the regular graduate training program of the University and they are permitted to enroll in any course for which they possess the prerequisite training.

By the end of FY 1975, the Chicago degree program graduated participants from 26 countries all of whom have returned to lead education and communication aspects of family planning programs in their home communities. The University maintains followup contact with all its graduates through field visits and occasional publications. The non-degree and short-term program, involving graduate caliber participants who cannot be away from their home country jobs for an extended time, has also trained personnel from 24 countries. Thirty one Master's and three Ph.D's have been awarded. The summer workshops of 1975 enrolled 53 participants representing 22 countries.

Question 28: What research findings are there that can serve as guidelines for making IEC operations more effective and how is AID and its intermediaries applying these results?

Response: The main behavioral science disciplines that have been studying population problems are the fields of demography, sociology, economics, and public health. The areas now developing among the social sciences directly applicable to IEC are psychology, social psychology, anthropology, and communication.

Communication research results relevant to family planning are being applied to family planning operating systems. Also, an effort is being made to supply the actual materials produced in research to family planning operating programs in the field. The Population Information Program developed at George Washington University with AID support is the most important source of well digested and lucidly written technological information for the population and family planning field. In just three years it has become a well recognized leader in the population information field.

Question 29: What are the principal features of the IE "action" program that PHA/POP plans to implement over the next three years?

Response: The IE "action" program is to pursue the six strategies that have been listed under Question 26 as follows:

Strategy 1 - Drive to get population/family planning programs in priority LDCs to plan and implement country IE strategies.

Country information strategies should give attention to the five "action" audiences that are important to success of family planning programs, developing a mix of efforts specifically attuned to the state of development and needs of private and public sector programs of individual countries. A major purpose of the IE strategy is to achieve knowledge availability to match, extend, and support community and clinic availability of commodities and services, and to achieve public awareness and support for family planning programs.

A.I.D. "Actions"

A. To make or improve country IE strategies. PHA/POP should promote strategy analysis, planning, and development. To this end the IE branch working with the University of Chicago and the East-West Center Communication Institute should bring together relevant materials for a manual of country IE strategy development. Such basic materials should be supported wherever requested, with field training and technical assistance in strategy development carried out by diagnostic and advisory teams which might be supplied from the East-West Communication Institute, the University of Chicago, or from a new IE support center. The implementation of country IE strategies depends upon the availability of adequate IE professional and voluntary staff and on funds and materials. Staff development is being carried forward by international and in-country training and by the provision of technical assistance through programs at the University of Chicago and the East-West Center. To insure resources, A.I.D. should provide bilateral funding in those countries where there are programs and encourage the use of funds available through IPPF, UNFPA, and other donors wherever they are active. Host countries and other national institutions should be encouraged to provide resources for carrying out IE country strategies.

A major objective of each country program IE strategy should be to improve the effectiveness of operating population/family planning programs. To accomplish this, effort should be made to focus attention sharply on the five "action" audiences and work out effective ways of meeting the needs of each of these audiences.

B. Initiate or improve IE campaigns. By direct action and through contractor/grantees, A.I.D. should seek to assist priority countries to activate and carry out IE campaigns as appropriate to needs and stage of development of country programs.

1. Reproducers Campaign. Because of increased pill availability in most priority countries, a major feature of the Reproducers Action Audience Campaign should be a campaign related to the pill. It should focus attention on the general information and specific knowledge which the reproducers' audience needs to have with respect to the pill, how it operates, how it is taken, what its advantages and disadvantages are, and where and how it can be gotten. A second aspect of the reproducers' IE campaign should deal with the condom. A third subject area could, in conjunction with AVS and other intermediaries, give specific attention to sterilization. A final component could include efforts to change the family size norm. The family size norm efforts should specifically focus on male attitudes, new roles for women, and the changing position of families who are achieving greater economic security through development.

2. Controller's Campaign. There are many aspects of the controllers' campaign which deserve attention and the needs of different countries at different stages of development will vary widely. A pill component in the controllers' campaign could be directed at providing leadership groups with information which they need in deciding whether the pill should be widely disseminated in their countries. As an approach to this aspect of the controllers' campaign, a detailed outline of a "Statesman's Guide to the Contraceptive Pill" has already been put together and work will move forward in trying to develop this as a specific resource relating to various methods of contraception. A wide range of other elements that should be considered for controller campaigns include population awareness and the development of such themes as: Fertility control as an important and necessary ingredient if development is to succeed, fertility management as essential to improve the health and elevate the quality of life, and many others.

3. On-Coming Reproducers Campaign. This activity would be directed at teenagers with an important approach to the concept that teenage births are risky. Effort should be made to promote delay of marriage, delay of first pregnancy, use of the pill as a means of delaying pregnancy, and spacing births. A further important component of this campaign is the population education effort that might be made both through school systems and out-of-school training.

4. General Public Campaign. While most of the elements that make up the general public are members of one or another of the four "action" audiences that are directly tied into population/family planning activities, nevertheless the IE strategy of a country should give consideration to activities and sets of messages which are directed to the community as a whole. The objective of the general public campaign is to develop a general population awareness and attitude that will enable and foster support of P/FP programs.

5. Deliverers of Information and Services Campaign. This "action" audience is highly specialized and varied, being comprised of all of the various professions and "action" categories that are directly related

to the delivery of information and services. The IE strategy with respect to this audience should operate closely in conjunction with manpower development training programs. In addition there are a number of IE functions that relate to recruitment of good personnel into the program, the maintenance of morale by interpreting the service deliverers to the community as a whole, and other activities of this sort. A major need is to use both training and information education processes to help service deliverers to be good communicators and to relate with their clients in such ways that their treatment of people does not turn them off of the family planning program.

Strategy 2 - Organize the staffs, skills, and resources of A.I.D. and A.I.D.'s contractor grantees, around "action" audience campaigns that can be made directly relevant to the IE strategies that are developed in individual countries.

The detailed day-to-day action that will supply knowledge availability to meet commodity and service availability must take place in the individual countries where programs function. The major inter-regionally funded IE resources which A.I.D. has helped to develop are physically distant from field operating programs and can assist them only through field visits, the supply of information and materials, and other technical aid. Nevertheless, the real objective of all of these efforts is to be able to assist the countries in developing and carrying out effective IE strategies that are related to all five of the "action" audiences. This is a high priority strategy because it is the means by which resources, skills and operations can be focused and targeted to specific operational needs. It is proposed that we reorganize our thinking about the way in which we function to concentrate on a pattern of efforts that parallel those which should form the major structure of the country IE strategies.

1. Reproducers "Action" Audience Campaign. The essence of effectiveness with this audience requires that IE activities be country-specific and culture-specific. Most IE activities have to take place in the language or languages of the country concerned since a very large proportion of all reproducers are not educated or sophisticated enough to command one of the major world languages. It is therefore necessary to organize PHA/POP's efforts in this area with much emphasis on generating ideas and acting as a stimulus and clearing house for exchange of examples of successful activities. The major inputs which can be made from Washington relate to the stimulation of new ideas and to encouragement of local efforts.

2. Controllers of Policy. In many countries where the enunciation of population policies has not yet taken place, it is the controllers of policy audience that is crucial to reach and influence. It is by changing their attitudes and actions that the way will be opened to mount, to support, and to drive forward population/family planning programs. This campaign is therefore of the greatest importance. In carrying it forward the IE Branch needs to work closely with the Policy Division. The Policy

Division should be the major source of the scientific data and information that is worked into the communication processes and moved out to the controllers. It should also have a large say in the setting of strategy and the selection of countries and the groups within countries as specific targets. The role of the IE branch will be that of working out ways to communicate the information and messages which the Policy Division helps define and generate.

In planning this campaign it will be necessary to operate at regional levels. In most cases in Asia, the Asia Foundation can plan an important role in efforts to reach and influence controller groups that in that part of the world will be principally important for their ability to increase the support given to population/family planning activities rather than in the formulation of policies, per se. An important channel is the Asian Mass Communication Research and Information Centre in Singapore.

The approach to the controllers' of policy in Latin America is entirely different from that which is effective in Asia. A.I.D. is already engaged with the Dialogue Center at Airlie House and with the production and use of Elite Motivation Films, also at Airlie House, as two major instruments for contacting and influencing elites in Latin America.

The situation with respect to this audience in Africa and the Middle East also differs from that in either Asia or Latin America. Here we have many fewer tools with which to work and the problems require more direct attention from the IE branch of A.I.D./Washington.

3. General Public Campaign. This campaign is one that will have to be mounted largely from within countries and the amount of time, energy, and resources which the IE branch and our contractor/grantees can apply to it is limited. However, the East-West Center with its interests in mass media, and the University of Chicago with its interests in this area, can be of some help in designing and carrying out the general public campaign.

4. Deliverers of Information and Services "Action" Audience. This is a diverse group with many different sub-groups. One of our major channels of contact with this group is through such training systems as PIEGO, Downstate, University of Connecticut, IASSW, and the like. One of the major groups that needs to be focused on here is the deliverers of information. The short-term training programs of the East-West Center and long-term training at the University of Chicago are major resources in developing the professional skills for those who are to be information deliverers. The Asia Foundation is a further important resource with respect to this category of activity.

Strategy 3 - Cooperate and coordinate with the IE activities of other donors and intermediaries.

The principal donors and intermediaries who have significant IE activities

are the Ford Foundation; the Population Council; IPPF which reaches a large number of private sector organizations; the UNFPA which has extensive activities with host governments; the FPIA with programs related to church and voluntary agency health programs; the Pathfinder Fund and Asia Foundation which reach many organizations and groups in the LDCs; and UNESCO which is becoming more effective in the population education field. This cooperation/coordination needs to take place in a number of ways.

1. It is important to develop a consensus on the major elements of in-country IE strategies. It would be highly desirable if all of these agencies could come to a basic common philosophy so that their activities and ideas would tend to reinforce each other in the field.

2. IPPF, UNFPA, and UNESCO all have important contributions to make in developing professional and volunteer staffs through international and in-country training and technical assistance. Any activities that A.I.D. engages in should be well coordinated with these efforts.

3. IPPF and UNFPA have access to considerable monetary resources that can be drawn upon to insure that country programs have the capacity to implement their IE strategies. A.I.D. should exert leadership with respect to achieving the cooperation/coordination that would make it possible to avoid duplication, reinforce activities and, in a number of places, make it possible for A.I.D. to turn over activities to these other groups and bring the workload and responsibilities that A.I.D. tries to discharge into more limited scope.

4. A major function of A.I.D. in respect to these other organizations would be that of bringing to bear our subject matter knowledge and expertise in designing materials and processes so that the nature and quality of the work which is performed by these other agencies can be improved.

A part of this process will involve the sharing with these agencies of interests in and knowledge about the five "action" audiences and the campaigns which we propose to mount.

Strategy 4 - Work with and through ancillary organizations that have large clientele.

One of the most important processes by which population/family planning can be made acceptable and moved into remote areas is to generate a positive social pressure in favor of small families and the practice of family planning. A major way to accomplish this purpose is to use as many types of person-to-person, small group and community contacts as possible as channels to teach people about the fundamentals of human reproduction and the way in which family planning works and can serve them. A.I.D. has already developed a considerable amount of experience

in working with a number of such groups, the midwives, the home economists, and the literacy education people. Work is now going forward to include pharmacists, and agricultural extension people in this category of relationships. The quantities of resources that are required to set up and operate in these areas are relatively modest though they vary from group to group. This category of activity impinges particularly sharply on efforts to get family planning accepted by and to be acceptable to rural people so that it supports high priority objectives. As the effort to grow more food on small farms in densely populated parts of the world is intensified through agricultural extension, it is important to continue efforts to include population awareness and family planning practice in both home economics and agricultural extension processes. In spite of limitations of personnel and resources at the present time, these efforts should not be set aside. There may be new ways in which they can be tackled and carried forward even within our present limitations.

Strategy 5 - Rationalize and improve the effectiveness and cost effectiveness of the generation and flow of P/FP information and IE materials.

The quantity of printed P/FP materials being produced and distributed throughout the world is large and redundant and, in many cases, so far away from the needs of operational target audiences that it is fair to say that we are now in the midst of a population publication pollution situation that urgently requires attention. This material in large measure relates to the passing on of scholarly information to various segments of the deliverers of information and services audience. A small portion of it may be of relevance to policy-makers, but most of them will not read the kind of material that is being produced in greatest quantities because it is too scientific and scholarly for most readers.

Among the principal producers and distributors of population publications that A.I.D. finances in whole or in part are those of the Population Council, the IPPF, the East-West Center, the University of North Carolina, and the Population Information Program at GW. A number of these organizations have quite large mailing lists. IPPF has over 60,000 names on its list, 8,000 of them in the United States; it mails a variety of publications to all or selected parts of this list. The Population Council has other lists that aggregate into the thousands. PIP has about 30,000 names on its mailing list. These lists serve each group well, but it is a good bet that there is a considerable level of overlapping between these various lists. To rationalize and improve this situation, a number of things need to be done.

1. A careful analysis of publications and mailing lists needs to be made in advance of a meeting of the principals involved in the major printed material producing agencies.

2. An examination needs to be made of the target audiences at which each publication is aimed. Is too much material being prepared for some classes of users and not enough for others?

3. The level of sophistication and reading difficulty of much of this material should be examined. There should be an identification of audiences which can be reached only by (a) those publications that have relatively simple, clear language used in them whether it be English, French, or Spanish and (b) those audiences that can be reached only through a translation into some non-European language. The selection, collation, condensation, rewriting and pointing to operating population/family planning program needs that is now being done so well by the Population Information Program, largely with bio-medical information, need to be applied to a good many other subject matter areas.

4. A careful dividing up of subject matter areas and target audiences needs to be done in order to insure that there is a more even distribution of material across the whole spectrum.

5. Information/communication efforts need to be focused on operating institutions in the field and not just on individuals, on the one hand, or educational institutions on the other. At the present time we do not know of a reliable list of managers of operating family planning programs in the world. This list would be of great importance in mounting a special campaign to help managers improve their performance.

Plans that were formulated for taking the above five steps needed to tackle the "population publication pollution" problem listed above were postponed when the RIF removed the personnel who could have made it possible to start. The FY 1976 work plan still includes this activity and it will be done if the necessary manpower and funding requested is provided.

Strategy 6 - Give attention to our ability to use mass media to play a number of population/family planning continuing themes.

No one knows the degree to which the mass media have been a major element in the spurring of the development process. It seems fair to conclude that knowledge of basic personal hygiene and health, for example, has spread throughout the less developed countries much more rapidly than the limited range and budgets of formal health delivery systems could account for. Certainly, an important part of this process has been carried out as a by-product of the expanding communication through radio, films, and now, increasingly, television.

population/family planning messages are being transmitted through these media. As the food crisis grows, it will be increasingly important to reach the people of the world with information about the role of population in the food situation. The fact that family planning services can be made available even without the intervention of clinics or medical organizations is another important theme that needs to be played on a worldwide scale. There are many other themes: the safety and effectiveness of the pill; the nature of the processes by which population growth is speeded or retarded; the whole interrelationship between population and pollution and natural resources. Our program and strategy in this area should be one that would not require great quantities of money but should be kept clearly in mind and worked at through a number of channels.

We look to the future. It is certain that these mass media instrumentalities will continue to grow and become more and more important in the lives of all people, even those who are out in remote villages. Next year, when India gets its earth satellite television broadcasting system in operation, we will have the first example of a whole continent being able to receive messages from a single set of transmitters that cover a base area. The visuals will be more or less universal and audio reception in a number of languages can be selected at the receiver. We are now asking the East-West Center to pull together for us a study of the extent to which the mass media -- radio, films, and television -- are now functioning in the various priority LDC countries and to what extent

Question 30: What is the estimate of the population/family planning manpower needs that the LDC programs have for the next five to ten years? How was it arrived at? What are the functions that need to be performed? What manpower development goals have been set?

Response: Manpower development requirements for population/family planning activities in less developed countries have been studied over the past five years and qualitative goals have been set. Quantitative studies have also been made but they are not too reliable. Nevertheless, there is sufficient quantitative guidance to define the order of magnitude of the problem of manpower development.

The quantitative and qualitative estimates have been developed in three distinct steps.

Step one was a 1970 survey by a questionnaire sent to all A.I.D. field missions. The questionnaire was completed and returned by 37 countries. Table 1*summarizes the principal results, estimates the then-projected volume of training and shows the estimate of short-fall anticipated for the decade. Because of the many variable that bear on personnel needs, the specific figures in this table are not now relevant, but they point to important conclusions with respect to manpower problems.

The 37 program countries had a total population of about 1,200,000,000 in 1970. Altogether they had 300,000 physicians, 185,000 nurses, and 129,000 nurse/midwives to provide medical services for this total population. It is significant that only 3.0 percent of the doctors, 1.6 percent of the nurses and 17.9 percent of the nurse/midwives were reported as giving half or more of their time to family planning.

The estimated short-fall of family planning personnel for the 1970-80 decade ran into the tens of thousands for most categories of personnel and aggregated over 200,000 for all types combined. These estimates clearly indicate that: (a) the total manpower requirements for family planning operations are quite large; and, (b) that there must be considerable expansion in recruitment and training to meet these requirements.

There was a serious underestimation of the number of subprofessionals required in family planning programs. We know that in-country training programs, particularly in large countries like India, Indonesia, and Korea, have actually trained larger numbers of health visitors and family planning visitors than are indicated by this table.

*See page 87

The second step in assessing population manpower needs was a study carried out by the University of North Carolina and the Research Triangle Institute. The principal results of this study are in CPC Working Paper No. 1, Family Planning Manpower: Problems and Priorities by Thomas A. Hall, Thomas J. Bacon, Daniel G. Horvitz and Marian Smallegan, published by The Carolina Population Center, 1974. This study included an examination of the entire literature on family planning manpower and reported detailed studies carried out in five countries in Asia, Africa and Latin America.

The study presents findings dealing with manpower planning, manpower recruitment and selection, manpower training, and manpower use. It identified issues and makes recommendations relevant to each of these topics. This body of knowledge has been used in planning the PHA/POP manpower development and training program.

The third step was the development of a classification of job designations and the laying out of an analysis of the numbers needed, the source of recruits, the training requirements and a listing of A.I.D. supported programs to meet these requirements.

Types of Manpower and Functions they Must Perform in FP Activities

I. Managerial

- A. First level: Management of national, regional, and provincial governments, and private population/family planning programs.
- B. Second level, staff: Program planning; information, education, and communication ; evaluation; training; medical, nurse/nurse-midwife, and social work professional management; personnel, budget, and fiscal; supply and logistics.
- C. Second level, line: Geographic unit leadership and service unit leadership.

II. Operating

- A. Clinical: Services rendered by physicians, Ob/Gyn staff; nurse/midwives, and midwives; nurses; aids and helpers.
- B. Community and outreach: Social work, information, education, and communication; home visiting; volunteer services.
- C. Commercial: Managerial, merchandising and advertising, and retail sales.

III. Supporting:

Research, training, statistical service, advisory services and IEC media specialists.

IV. Manpower planning

V. Preparation of U.S. population/family planning manpower for overseas service.

A. A.I.D. staff development

B. Training of personnel for special services with overseas agencies' intermediaries and programs.

Manpower Development Goals

1. To increasingly buildup the in-country capacity to train required manpower and to reduce the numbers brought to the U.S. for training.
2. To provide, principally, topping off short-term training for those who will train and lead others in their countries in the major relevant professional and subject matter areas. These efforts to cover a) physicians, b) nurse midwives, c) nurses, d) social workers, e) training officers, f) managers, g) information, education and communication specialists.
3. To provide assistance for academic and short-term training in other fields or combinations of fields as may be required to meet the special needs of country programs.
4. To adapt this training to the rapidly changing requirements of new or modified technologies and evolving FP program operating styles.
5. To adjust the volume of U.S. and third country training to meet the changing needs of LDC programs.

Question 31: What manpower development programs is A.I.D. now supporting directly and through its intermediaries, and how do they relate to meeting the identified goals? How do they fit existing Congressional mandates?

Response: Through a series of grants and contracts, PHA/POP supports five major training programs designed to meet the objectives for manpower development outlined above. All of these programs have the objective of strengthening the manpower component in P/FP programs in high priority developing countries. They seek to mobilize and bring to bear the specialized applicable expertise that the U. S. government and society can supply. To effectively achieve this goal each program is based on and managed by a specific institution or group of institutions, usually located in the United States, where teams of leaders from the relevant profession can be brought for advanced instruction and followed up with technical support as they return to their countries to strengthen existing or establish new training centers. They are all designed with the purpose of eventually shifting all training out of the United States and into the less developed countries.

The first of these programs is designed to give advanced training to obstetricians and gynecologists and other surgically qualified physicians. This program is based on a new corporation set up under the trustees of The Johns Hopkins University and operates through a series of associated institutions including the medical school at Hopkins, the School of Graduate Public Health at the University of Pittsburgh and Washington University School of Medicine in the United States, and the American University School of Medicine in Beirut, and a group of institutions in Korea. The program consists of intensive one-month to six-week courses of didactic and clinical training for obstetricians and gynecologists in all of the advanced techniques of fertility management. It includes an extensive review of reproductive physiology and medicine and includes support with necessary equipment and supplies to permit trainees to return to their homes and establish operating clinics and training centers in the procedures and methods that have been taught. It has a followup program that sends qualified Americans or third country nationals to the medical institution of each trainee to give further training in the local environment and to assist in developing and maintaining proper standards for the advanced procedures that have been taught. This program is managed under the general guidance of an International Council that involves leaders in obstetrics and gynecology from all over the less developed world to help design and guide the program. A major purpose is to extensively involve Ob/Gyn leadership in the family planning effort.

The second program is for nurse/midwives. It is based on the Downstate Medical Center of the University of New York located in Brooklyn, New York. In this program teams of nurse/midwives, leaders, and trainers from less developed countries are brought to Brooklyn for eight to ten weeks of

intensive advanced training in all aspects of family planning that are relevant to the services which nurse/midwives provide. These teams then return to their home countries to strengthen or establish nurse/midwife family planning clinical training programs which are advised and assisted as required by the faculty at Downstate. Thus far, Downstate has been instrumental in upgrading the quality and extending the quantity of training for nurse/midwives in ten countries overseas by such support of returned teams. In addition, many individuals have been trained who are delivering services and in some cases provided additional training to other countries. This program continues in high demand and is making an important impact in the supply of family planning services through nurse/midwives.

The third program is for the training of public health and community medicine nurses for the introduction and conduct of family planning services through community and maternal and child health programs. Trainees in this area are being trained at Harbor General Hospital in Los Angeles for service in a number of Latin American countries at Meharry Medical College in Nashville and its contracted sub-training centers and at the University of California at Santa Cruz. The need in this area is such that a careful study is now underway of how to expand the training in this aspect of professional service for family planning.

The fourth worldwide training program is for social workers. It is being implemented through a contract with the International Association of Schools of Social Work which, working with member schools in the developing countries, has already set up pilot programs in 30 schools in 15 countries. These pilot schools are reassessing their curricula and integrating population and family planning subjects and components. The purpose is to provide pre-service professional training for social workers in family planning so that whether they enter fulltime work in family planning operating organizations or work in social welfare and social service capacities in many other kinds of institutions, they are fully capable of teaching and implementing the necessary counseling referral and other services which social workers are able to provide in the family planning field. The technique here has been to operate with the faculties of the schools of social work on their home campuses to generate in the whole faculty an understanding of, and participation in, the teaching about population/family planning. As an adjunct to this program a second project is operating under contract with the School of Social Work at the University of Michigan through which selected young professors from less developed country schools of social work are given advanced degrees at the Masters level in P/FP.

The fifth program is directed at improving the quality and effectiveness of the training systems in the less developed countries. This is accomplished through a program of the University of Connecticut, Hartford. Teams of trainers from the less developed countries are brought to Hartford for 12 weeks of intensive work in how to design, manage, and teach all aspects of family planning through training programs that operate in local areas in

the developing countries. These training officers are responsible for the training of the very large number of sub-professional types of personnel that make up the great bulk of family planning workers who have direct contact with client families and whose effectiveness bears so heavily on the success of programs of this sort. Planning is now underway to increase the capacity of this program to provide training at overseas locations that will markedly expand the capacity of high priority countries to meet their in-country training needs.

In addition to these five profession-related training programs, PHA/POP supports efforts that relate to two additional areas of manpower development activity.

The first of these is a program for managers and executives. It is operated on a fee basis by the Center for Population Activities of the Futuremics Corporation. This program is carried out twice a year. Top and middle management personnel are given training in all aspects of family planning program development and operation from the point of view of the managers who lead programs at various levels from clinic to national program. This activity is also being studied for possible transfer to overseas locations with efforts to expand its usefulness further and develop a larger and more effective core of managers for family planning programs. The second of these minor programs is one that relates to continued efforts to improve manpower planning. This work will be carried forward by means of some smaller projects that are related to the problems of specific countries.

The PHA/POP/MI staff gives professional oversight to an extensive participant training program which is funded out of PIO/P's issued by country Missions and is managed by SER/IT. This program deals with about 300 participants per year that study in a variety of institutions and centers throughout the U. S. Most of the PIO/P participants go to programs other than the five special professional ones described above. As part of the participant training program a special worldwide participant fund is operated. This fund is designed to provide money for the central issue of PIO/P's by SER/IT with PHA/POP/MI approval, to provide training for participants from countries where there are no A.I.D. Missions or in special circumstances where a government has no P/FP program and so will not agree to PIO/P funding in this field.

How do they fit existing Congressional mandates? A.I.D. population programs carry two special mandates from the Congress. They are: (1) to focus attention on getting family planning to the poorest and most needy components of less developed country populations and, (2) efforts to enhance the status of women in the less developed countries in every way possible.

These training programs give strong emphasis on both of these mandates throughout their activities. Even at the most advanced and professional level of training for obstetricians and gynecologists in advanced surgical techniques, a constant effort is made to simplify those techniques and make applicable for use in remote clinics on an outpatient basis so that

technically and organizationally these services can be made available in rural areas. This same emphasis goes right down through all of the other professional training areas. The training of community and public health nurses is especially relevant to this mandate since it will be through nursing and nurse/midwife personnel that much of the delivery of services to rural people will be accomplished. The training of these classes of personnel includes a strong emphasis on the development of training and management systems for the use of auxiliary and helper personnel that can be multiplied to cover the extensive needs of rural people that reach far beyond the existing confines of health delivery systems.

All of these training programs are deeply involved with the training of women. Thus far, about one-third of all of the physicians trained in the advanced fertility management clinics have been women. Practically all the nurses and nurse/midwives are women and operate in training centers for women in the less developed countries. A large proportion of both social workers and population training officers are also women.

Question 32: What are the problems of bringing U. S. capability and technical capacity to bear on the development of needed LDC family planning manpower? How does the present and planned A.I.D. program tackle these problems?

Response: Family planning programs must be manned by a wide variety of personnel who are able to work effectively with the people whose reproductive behavior they seek to change. Family planning personnel must be respected, accepted in the community, and, for the most part, natives of the country in which they serve. They must be well trained in all the skills and subject matter relevant to effective family planning service delivery and information and instruction to attract and reinforce behavior change.

This means that the training and utilization of population manpower must take place in each of the countries where programs are operated.

For the United States to provide effective assistance in manpower development, beyond simply transferring resources to the countries themselves, it is necessary that ways be found to link U. S. capabilities with those of the countries to be served. This linkage must take place through two types of institutions within the less developed country: first, the family planning operating agencies that actually use personnel to carry out family planning programs, and second, either the training facilities within those institutions or training facilities in colleges, universities, and other groups that develop and supply personnel to family planning operations.

A major problem involves transferring knowledge and experience, principally generated in the United States, to the less developed countries. A second problem has to do with communicating knowledge and experience gained in the less developed countries back to the United States and between the less developed countries. Training systems must be designed to cope with each type of problem.

Furthermore, manpower development must be brought to the point where much of it can be carried on in each major country or region instead of transporting trainees to the United States.

Nevertheless, highly qualified LDC individuals still have a great interest in coming to the United States for training in an institution that has a worldwide reputation in the field, because of the prestige such training gives them back home. Although prestige is not as important as it was a few years ago, it still is a factor for some individuals and teams.

Training programs are now designed with the following characteristics:

1. For direct family planning activities, the emphasis of all U. S. training is on short-term courses for carefully selected individuals who

have already shown their mastery and capacities with respect to their particular subject matter area. They are brought to the United States, usually in teams, for intensive, specifically designed programs focused on transmitting to trainees the latest knowledge and the most applicable skills.

2. All training is of the involvement type with a minimum amount of lecture. There is much stress on such factors as workshops and seminars, on-the-job training, clinical experience, and community observation. The objective is to help the trainee obtain command and confidence in the application and use of his knowledge, as well as gaining didactic and theoretical information.

3. The American training institution pays great attention to the problems which the trainee brings from his country to his training experience. Furthermore, each training institution has the capability of providing followup technical assistance to the trainee when he returns home. It is increasingly clear that this followup training is of the utmost importance, because it insures that the administrative and operational situation to which the trainee returns is one in which he can successfully apply his new knowledge and skills.

4. Training programs are designed to insure that the participant is equipped with the necessary instruments, book, and documents -- tools with which to carry out his operational program when he returns home.

5. Strong emphasis is given to developing the multiplier effect, that is, institutionalizing the training into LDC situations where additional generations of trainees can be produced by the teams that get their advanced training in the U. S. There is the capability of equipping these second generation people with necessary instruments and other types of equipment.

6. Followup is emphasized. An increasing proportion of LDC trainers make field followup visits and carry on other workshop and training experiences that strengthen and reinforce the transfer of knowledge.

7. There is feedback to the training center in the United States of experience, knowledge, and data from the less developed countries, which help to improve the overall quality of the training.

Question 33: How has A.I.D. sought to use U. S. institutions to solve LDC family planning problems and to develop LDC institutions to take an increasingly important part in solving such problems?

Response: The institutions needed to support P/FP programs in the developing countries are those which can perform the functions of: (1) research (applied and basic); (2) training (practical and academic); (3) data collection and analysis for policy and program uses; (4) technical advisory services; (5) program evaluation and feedback; and, (6) information and knowledge storage and retrieval.

These functions are long range in nature and require well-trained personnel to perform them. A formal mechanism is required to organize their performance into a coordinated effort in support of policy and program activities. Thus, institutionalization is necessary.

A.I.D. interest in institutional support for population programs has two foci. One is the institutional support for A.I.D. itself. In performing its population assistance role, A.I.D. has need for professional expertise within the United States on which it can draw in assisting the developing countries to plan, organize, implement, evaluate, and to do their own training and research in P/FP.

The second focus is the institutional support requirements of P/FP programs and policies in the LDCs. This support depends in large part on trained manpower and professional resources. To meet these needs, it is necessary to provide adequate training, through institutions, to a substantial number of people and to provide each trained person with an adequate job assignment and support, including supervision and continuing education.

Every major P/FP program in an LDC requires strong institutional support if it is to operate at top level efficiency and effectiveness. Staff functions of research and training must be provided within the country at a level that ties in realistically with the local circumstances within which the program operates. Data collection and analysis for policy and programming uses are best performed by indigenous personnel functioning with a minimum of outside assistance.

Assistance agencies can contribute greatly to the performance and independence of the LDCs by helping them build institutional capacity to conduct their own affairs without outside help. Today, however, few if any developing countries have developed the required institutional support for their P/FP programs.

Development of P/FP Capabilities in U. S. Universities

Between 1966 and 1968 A.I.D. provided 211(d) grants to four U. S. universities -- Johns Hopkins, Michigan, North Carolina, and Hawaii. Each

grant was for a five-year period. Total grant support approximated \$6,000,000.

A.I.D.'s prime objective was to help the universities gear up for providing research, training, and advisory services that would be needed for P/FP programs in the '70's. The second objective was to create a critical mass of knowledgeable U. S. and LDC students who would be capable of manning P/FP action programs as these evolved.

For the most part, A.I.D. 211(d) objectives were achieved. Each grantee developed: (1) Intra- and multi-disciplinary curricula -- demonstration and teaching capabilities in P/FP subject areas at the master's and PhD levels of instruction; (2) Pure and applied research relevant to biomedicine and clinical techniques for fertility management; health, demographic, and sociological research for supporting P/FP programs and policies; (3) Advisory expertise which A.I.D., U. S. A.I.D., UN, and LDC governments and institutions utilize for formulating P/FP programs noted in one and two, above; (4) Multi-disciplinary P/FP centers within each university for institutionalizing research and training programs previously described. The centers, developed largely through A.I.D., were also supported by the respective universities, by Ford and Rockefeller Foundations, the Population Council, and HEW.

By 1970 four P/FP centers were functioning: Johns Hopkins Population Dynamics Center; University of Michigan Population Planning Center; University of North Carolina Population Center; and the University of Hawaii Population Family Planning Division in the School of Public Health.

Maintenance and Application of Capacity to LDC Needs

After assessing 211(d) accomplishments, in 1971 A.I.D. negotiated follow-up agreements (University Service Agreements -- USA's) with the same university grantees. Under the new grant guidelines the universities activated several short range, collaborative (Type I) sub-projects that were concerned with solving specific LDC P/FP problems. The sub-project activities consisted of research, demonstration, experimental and pilot projects -- surveys and studies that were prototypical, innovative, and practical.

As sub-projects were implemented, more LDC deficiencies surfaced. The LDCs' supportive functions emerged as being inadequate to serve existing problem solving sub-projects and incapable of sustaining -- or even promoting -- the self-sufficiency required for conducting more extended P/FP programs or policies without continuous outside help. Based on this evidence, the University of North Carolina USA was revised to test the applicability and viability of long range (Type II) sub-projects that would permit the collaborating U. S. LDC institutions to participate in more sustained institution building activities.

A summary of all Type I and Type II sub-projects by function, region, and goal is presented in the attached Table 2.

The reorientation of the U. S. universities from a self-development (211(d) concept) to productive involvement in LDC programs (USA purpose) appears to have been successfully achieved, but the fact remains that the universities' capabilities to respond to LDC and donor interests and to maintain U. S. research and training operations, draws heavily on their capacity to serve all masters. This has precipitated some staffing problems.

Current Situation

In the interest of economy, the USA's are being further focused and re-structured to enable universities to respond to basic training and specialized problem-solving needs. Also, efforts are being made to channel more funds into sub-projects closely integrated with the needs of LDC country programs. Currently, the availability of resources to support institutional building (Type II) projects is severely limited. In the future, should the funding picture improve, it is highly desirable to renew efforts to develop LDC supporting institution capabilities.

Question 34: What is the medium range need for LDC institutional development and how does A.I.D. propose to tackle it?

Response: The ultimate goal of LDC institutional development is the creation or enhancement of self-sustaining local capacities for high-level teaching, research, and services directed at the solution of population problems. External donor agencies assist in the process by identifying national scholars, researchers, medical practitioners, planners, and administrators with appropriate interests, and by limited provision of financial, technical, and professional support. However, the sustained encouragement, promulgation, and implementation of national population policies must finally rest on local funding and trained and committed personnel. Moreover, institutional development activities must employ strategies and time tables that reflect differing local contexts.

One goal of institutional development activities is improved public policies promulgated by national leaders and implemented by trained local personnel. Institutional development in this context is focused primarily on universities and autonomous research institutes. Such institutions play key roles in opinion formation, professional development, and the systematic adaptation of knowledge to national needs and contexts.

Another goal, which focuses on fertility regulation and related health sciences, emphasizes institutional development as a means of increasing local capacities for the design and monitoring of health programs and the provision of services that reduce birth rates. Institutional development is thus a means of developing health institutions whose goals are to acquire knowledge of fertility regulation, to disseminate that knowledge through the training of health manpower, and to bring such knowledge to bear directly on national population and related health problems.

Universities (medical schools and schools of public health) are the principal targets for institutional development in most countries because of their traditional roles as local sources of knowledge and their access to national elites. But less prestigious institutions, such as schools for medical assistants, para-medical personnel, and auxiliary health workers, must also be considered appropriate foci. Not only do such institutions play a key role in training personnel to provide fertility regulation services, but their graduates assist importantly in stimulating demand for such services.

The third concern is with the generation of knowledge of the biology of reproduction, with the development of improved bio-medical methods of fertility control, and with studies of the biological implications, including toxicity and pathology, of various methods of fertility control. While basic research in reproductive physiology is often best carried out in laboratories of the developed countries, many biological problems are unique to various areas of the developing world and may have significant or critical impact on the acceptability of various methods of fertility control.

Major developing countries with large populations and rapid growth rates need to have bio-medical resources in both trained professionals and equipped laboratories to study those problems in reproductive biology that are peculiar to their own area. Inasmuch as most such countries do not at present have these resources, they must be created through programs of institutional development in bio-medicine.

The above discussion gives an overview of the total range of institutional development that is needed in less developed countries. The achievement of these goals is a rather long-term enterprise. While A.I.D. has interests in these long-range goals, the immediate problem is to determine what should be done in the medium range for developing country institutions.

The following guiding principles are suggested as a base for determining the details of an institutional development program for the attainment of these desired intermediate objectives.

(1) A.I.D. should continue to support programs by which the interests and capabilities of U. S. universities are brought to bear to solve immediate problems of family planning programs and, as a concomitant, assist institutional development.

(2) Even though institutional development per se, is of relatively low priority in A.I.D.'s total scale, it should not be entirely neglected.

(3) The content and detailed activities of institutional development should be carefully tailored to conform to the special conditions of each of the four regions with attention to the degree of development of institutions and the special needs of each region.

(4) A.I.D. should continue to work through the Interagency Committee on Institutional Development, which it was instrumental in organizing two years ago, to orchestrate the efforts of various donors and intermediaries to get maximum effectiveness out of all resources directed at institutional development goals.

(5) Attention should be given to the integration of such programs as PIEGO, and nurse, and nurse/midwife training into the total institutional development effort.

(6) A.I.D. should focus its resources on those institutions and activities that can have the greatest impact on:

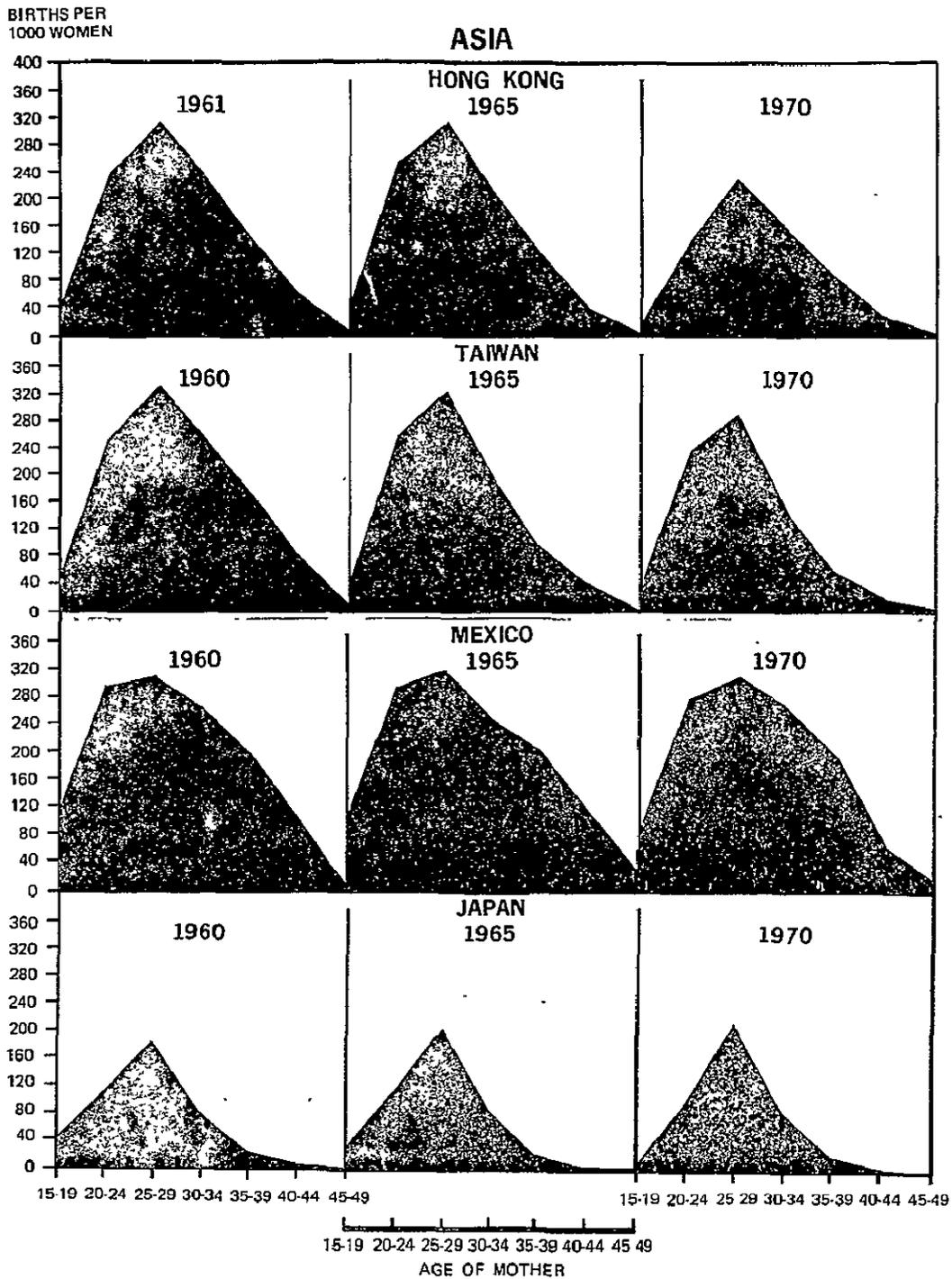
- (a) Policy development in countries that have no population policy;
- (b) On improving operational effectiveness of family planning programs in those countries that have policies and/or operating programs; and,
- (c) On those bio-medical development sites where the greatest impact on services delivery can be attained.

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to IGA Questions

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FIGURE 1

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME



Source: Prepared for the Office of Population Agency for International Development, by the International Statistical Programs Center, U.S. Bureau of the Census, January 1973

FIGURE 2

AGE-SPECIFIC FERTILITY RATES FOR COUNTRIES WITH VIGOROUS FAMILY PLANNING PROGRAMS DURING THE 1960s

BIRTHS PER 1,000 WOMEN

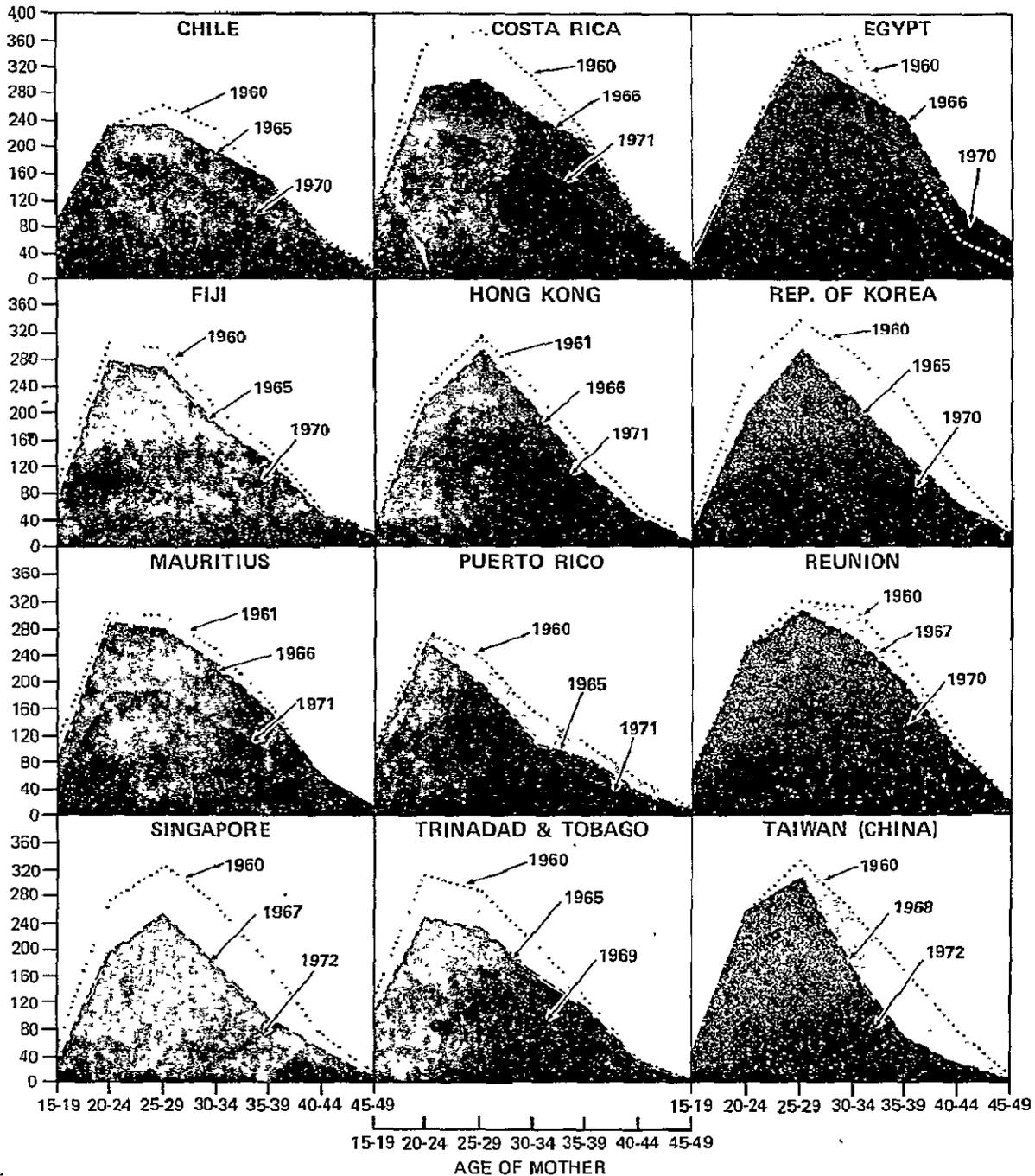


Fig 2. The fertility of women declined during the 1960s in countries with vigorous family planning programs. Oral contraceptives were emphasized in most of these programs. Legal status as well as availability of contraception played an important role in Reunion where fertility declined sharply after 1967 when legal restrictions were repealed.

FIGURE 3

AGE-SPECIFIC FERTILITY RATES FOR COUNTRIES WITHOUT VIGOROUS FAMILY PLANNING PROGRAMS DURING THE 1960s

BIRTHS PER
1,000 WOMEN

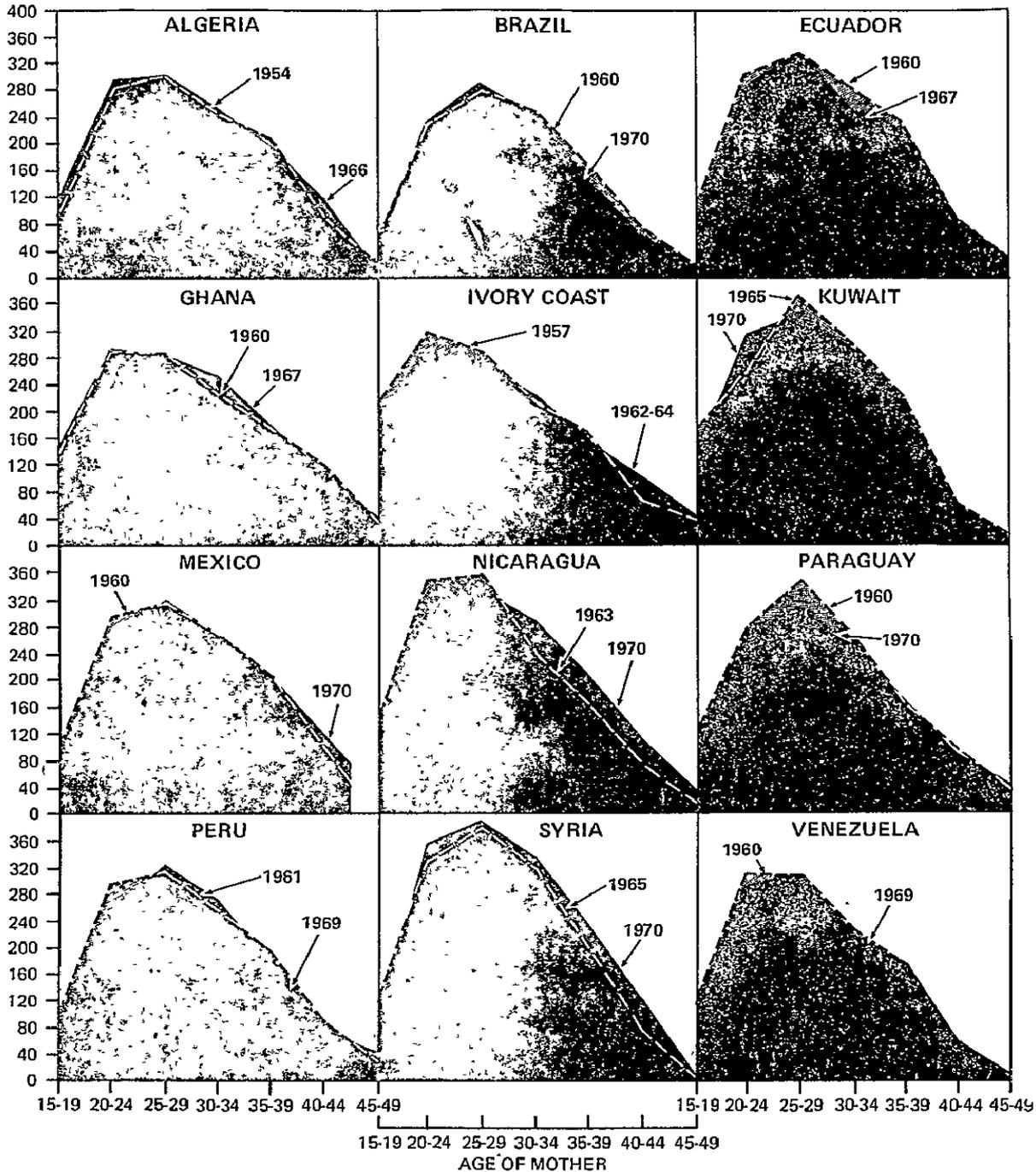


Fig. 3. Fertility rates remained high during the 1960s in developing countries without vigorous family planning programs. Private family planning associations did not exist in most of these countries before the late 1960s and government policy often actively discouraged contraceptive availability.

FIGURE 4A

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME

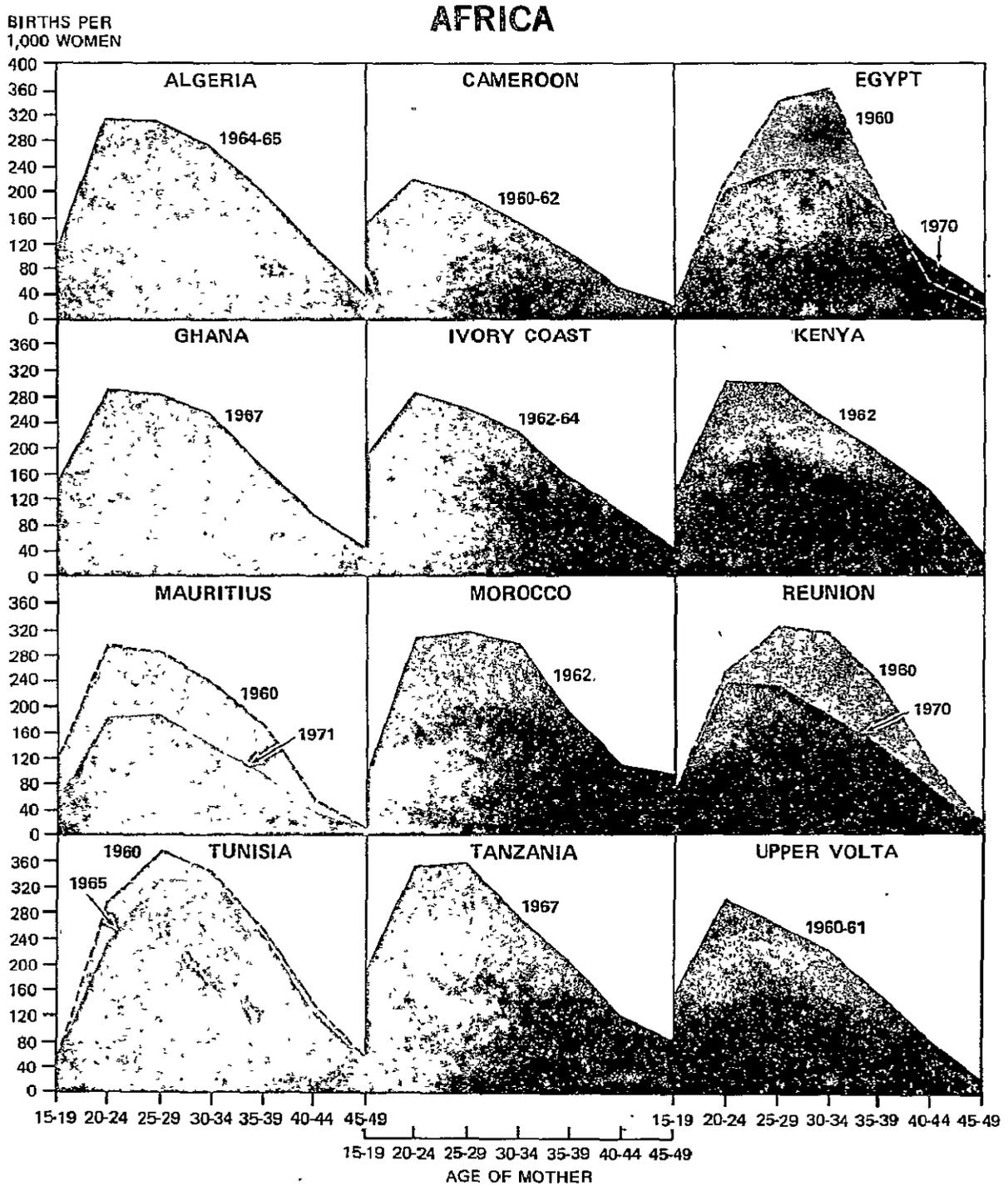


FIGURE 4B

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME

BIRTHS PER
1,000 WOMEN

AMERICA

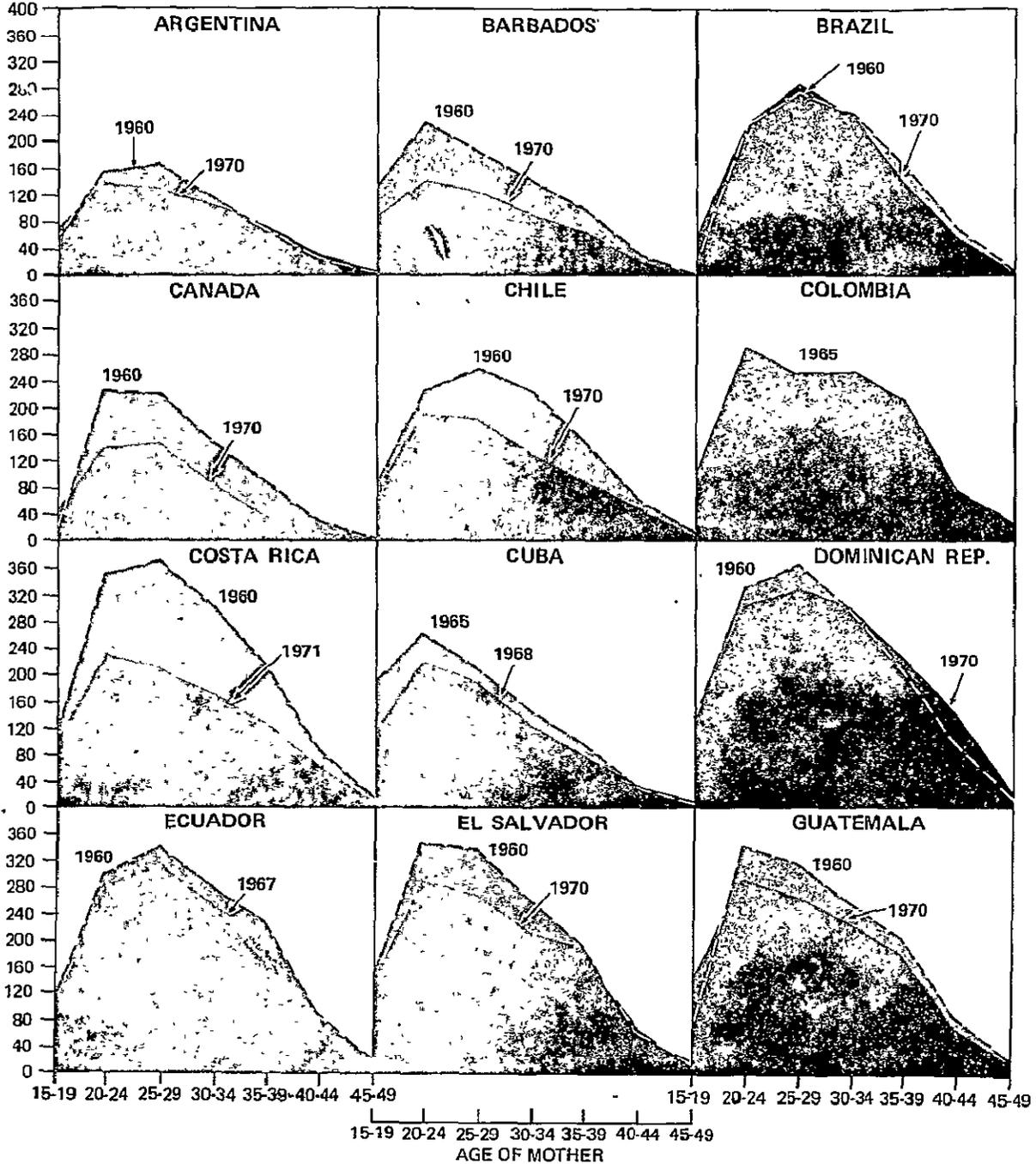


FIGURE 4C

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME

BIRTHS PER
1,000 WOMEN

AMERICA (CONTINUED)

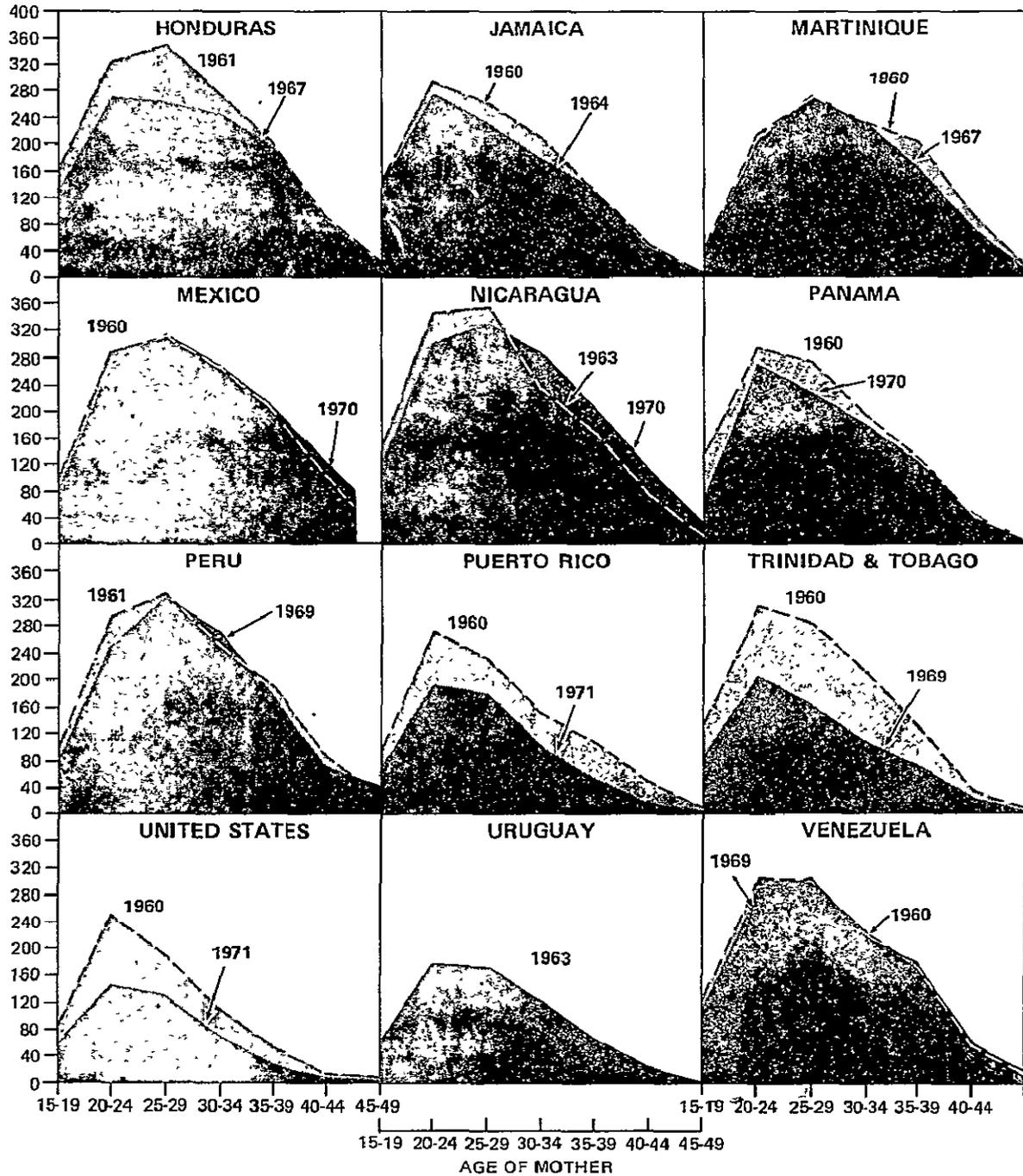


FIGURE 4D

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME

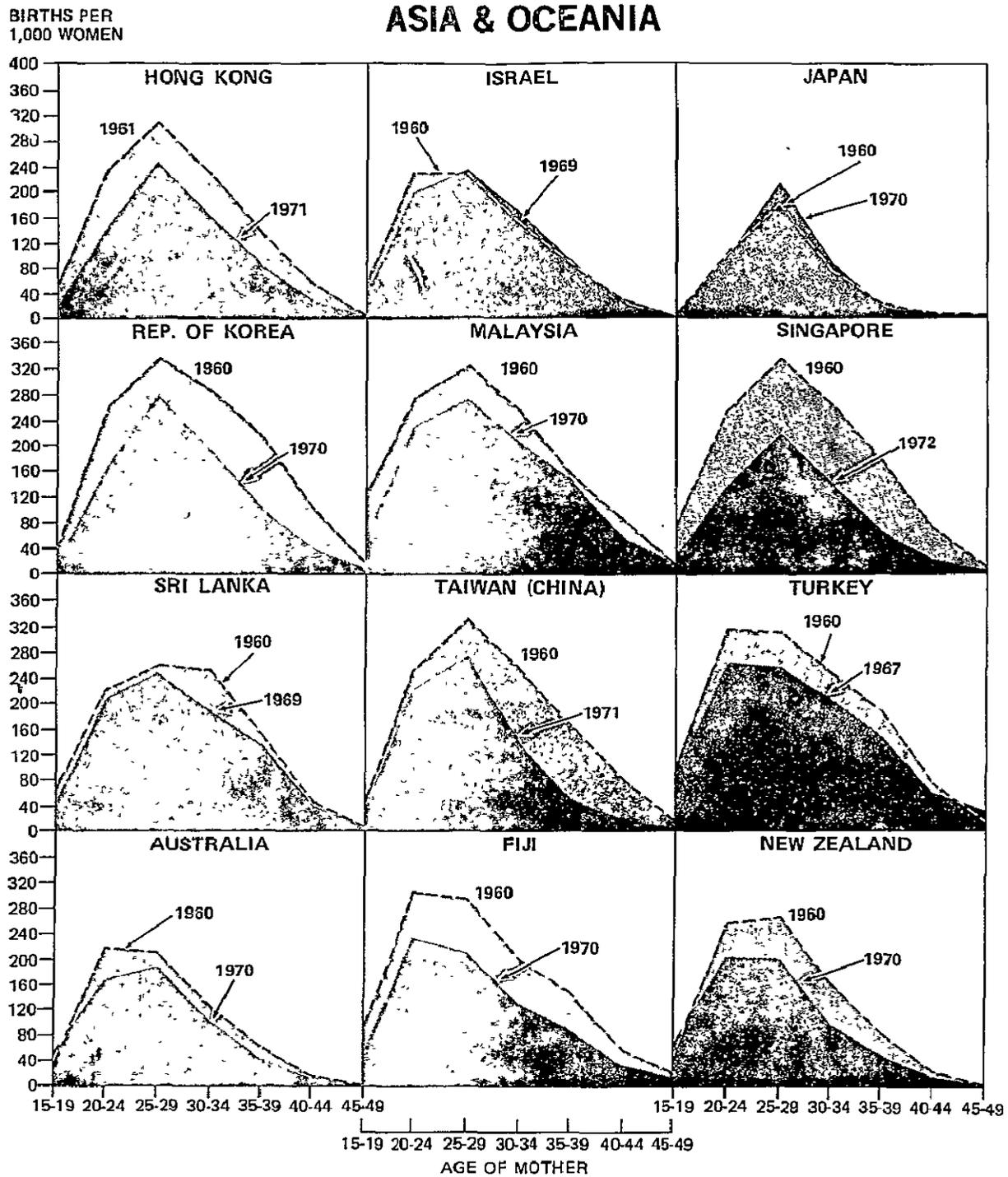


FIGURE 4E

AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME

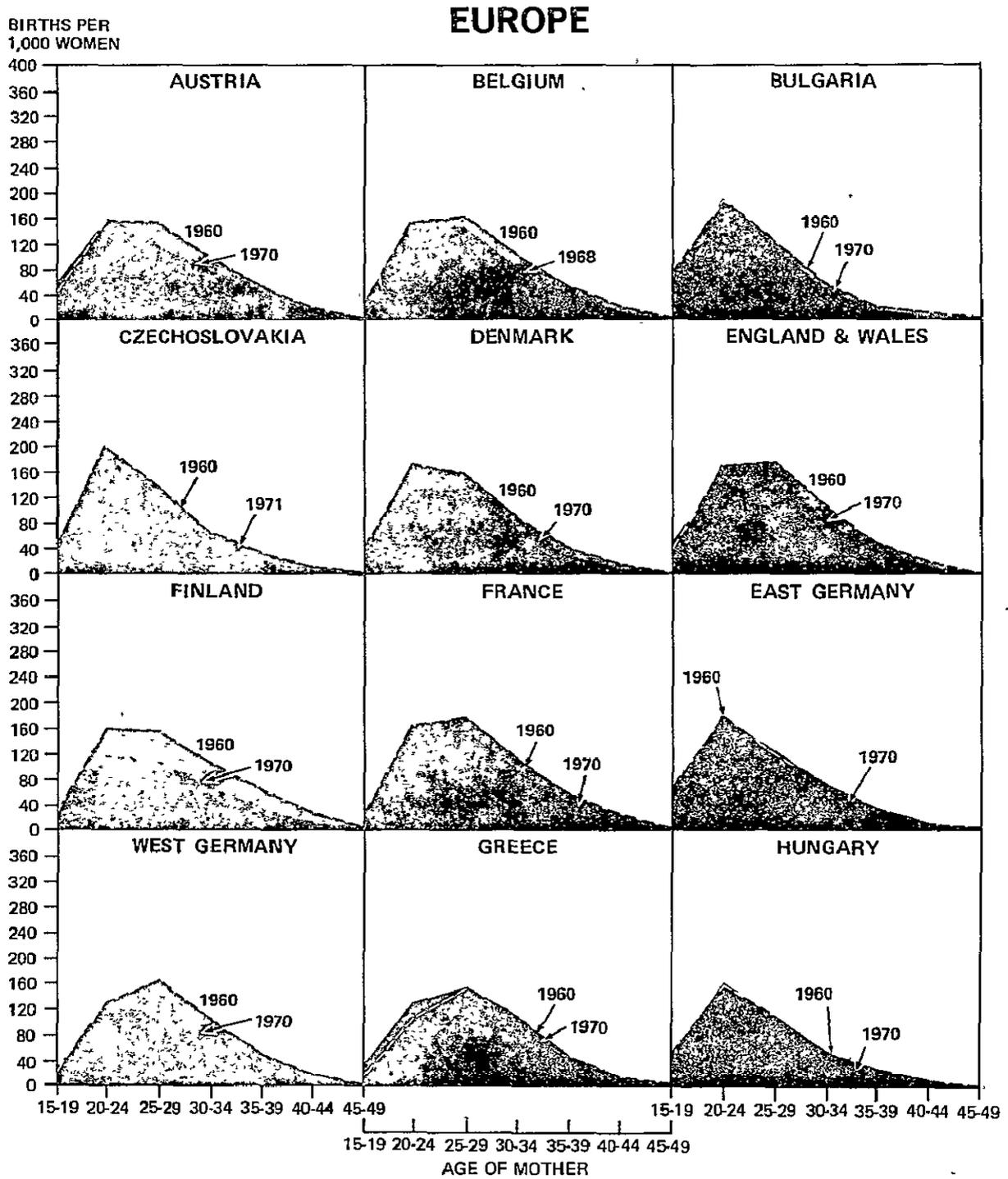
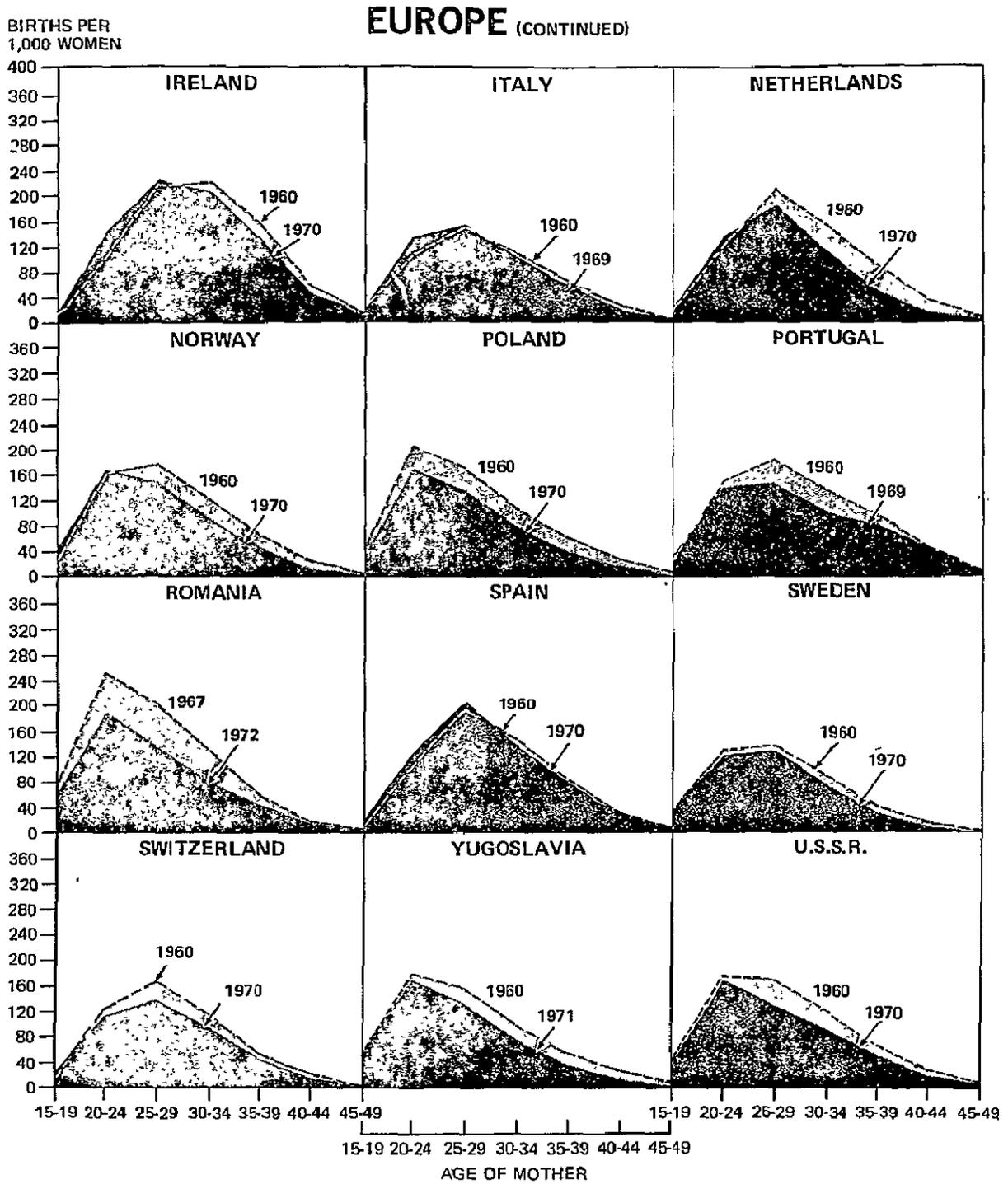


FIGURE 4F
AGE-SPECIFIC FERTILITY RATES BY CONTINENT, COUNTRY AND TIME



GOAL 51A

TABLE 1

MANPOWER NEEDS ANALYSIS--DATA SUPPLIED BY USAID's 37 COUNTRIES 1970

Category	Number	No. in Family Planning		Total	Percent in F.P.	No. Needed in Decade	No. to Meet Need	Avg. No. Completing Basic Trg. Annually			No. added same rate		Short Fall
		Full Time	About 1/2 Time					Domestic	Abroad	Total	1 yr	10 yrs	
<u>Professional</u>													
Physicians	302,523	3,828	6,728	10,556	3	44,397	34,331	18,675	303	18,978	569	5,690	13,288
Nurses	184,629	861	2,107	2,968	1.6	52,015	49,047	11,865	103	11,968	191.5	1,915	47,232
Nurse/Midwives	128,476	21,835	7,082	2,543	17.9	86,203	63,660	8,980	34		161.3	16,135	47,525
Demographers and Statisticians	2,863	417	121	538	18	7,050	6,512	287	35	322	58	580	5,932
Behavioral Scientists	9,739	108	77	185	2	1,194	1,009	4,593	87	4,680	94	940	69
Family Life Sex Educators	5,159	21	65	86	1.6	17,593	17,507	71	2	73	1	10	17,497
Health Educators	10,705+	9,963	41	10,004	93.4	26,445	16,441	269	24	293	273	2,730	13,711
Medical Social Workers	5,568	161	71	232	2	22,236	22,004	1,081	13	1,094	22	220	21,784
<u>Sub-Professional</u>													
Medical Assistants and Licentiatees	3,157	36	0	36	1	5,540	5,540	201	12	213	2	20	5,484
Health Visitors	6,919	5,471	47	5,518	100	43,870	38,352	818	3	2,558	2,558	25,580	12,772
Family Planning Visitors		15,022		58,885	100	58,885	43,663	2,555		2,555	2,595	25,555	18,108

TABLE 2

A.I.D. SPONSORED RESEARCH FOR MORE EFFECTIVE MEANS OF FERTILITY CONTROL

FISCAL YEARS 1967 - 1975

(Figures in \$000's)

	1967	1968	1969	1970	1971	1972	1973	1974	1975	TOTAL
<u>Research to Develop New Means</u>										
Corpus Luteum Studies:										
Worcester Foundation	--	109	--	--	99	--	--	--	--	208
NICHD-CPR	--	--	1,510	53	--	--	--	--	--	1,563
Antiprogestins:										
Population Council	--	--	3,000	--	--	--	--	--	--	3,000
Prostaglandins:										
Worcester Foundation	--	--	--	2,980	--	--	--	--	--	2,980
University of Wisconsin	--	--	--	--	227	--	--	--	--	227
Washington University	--	--	--	--	293	--	--	128	186	607
Makerere University	--	--	--	--	821	--	--	--	--	821
University of Singapore	--	--	--	--	--	--	475	--	--	475
Other	--	--	--	--	217	150	--	--	--	367
Gonadotropin Releasing Factor Inhibitors:										
Salk Institute	--	--	--	2,255	--	--	2,150	--	--	4,405
<u>Subtotal</u>										14,653
<u>Research to Improve Current Means</u>										
Intrauterine Devices:										
Battelle Memorial Institute	--	--	--	150	495	--	874	--	--	1,519
Other	--	--	--	--	12	--	--	--	--	12
IFRP, Inc.	--	--	--	--	--	--	--	--	210	210
Contraceptive Safety:										
Southwest Foundation	--	--	--	913	--	--	1,226	--	--	2,139

TABLE 2 (contd.)

A.I.D. SPONSORED RESEARCH FOR MORE EFFECTIVE MEANS OF FERTILITY CONTROL
FISCAL YEARS 1967 - 1975
 (Figures in \$000's)

	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>TOTAL</u>
Contraceptive & Disease Prophylaxis Agent:										
University of Pittsburgh	--	--	--	581	--	--	138	--	--	719
Sterilization and Surgical Equipment and Training:										
Battelle Memorial Institute	--	--	--	--	830	199	--	392	--	1,421
University of North Carolina	--	--	79	--	135	--	--	--	--	214
Johns Hopkins University	--	--	--	--	--	1,954	158	--	--	2,112
University of Colorado	--	--	--	--	--	--	76	--	--	76
Small Grants Program Applied Research on Fertility Regulation:										
University of Minnesota	--	--	--	--	--	3,350	--	--	--	3,350
Other	97	107.7	103	99	182	66	48	100	--	803.7
<u>Subtotal</u>										12,575.7
<u>Field Trials</u>										
International IUD Program:										
Pathfinder Fund	194	--	1,289	--	--	--	--	--	--	1,483
International Fertility Research Program:										
IFRP	--	--	--	--	3,106	1,800	--	1,500	2,695	9,101
Conventional Contraceptive Studies	--	346	440	340	--	--	--	--	--	1,126
<u>Subtotal</u>										11,710
<u>TOTAL</u>	<u>291</u>	<u>562.7</u>	<u>6,421</u>	<u>7,371</u>	<u>6,417</u>	<u>7,519</u>	<u>5,146</u>	<u>2,120</u>	<u>3,091</u>	<u>38,938.7</u>

POPULATION INFORMATION PROGRAM

Department of Medical and Public Affairs, The George Washington University Medical Center, 2001 S Street, N.W. Washington, D.C. 20009

Keep Up To Date On New Developments In Family Planning

Population Reports are designed to provide accurate, continuing, systematic and up-to-date information on new developments in fertility control. A regular series of reports will deal with each of the recognized birth control methods in the following categories:

- A. Steroidal contraceptives
- B. Intrauterine devices
- C. Sterilization, female
- D. Sterilization, male
- E. Rhythm
- F. Pregnancy Termination
- G. Prostaglandins
- H. Local Methods of Fertility Control
- I. Experimental Methods of Fertility Control

For continuing reference and convenience, information about each method will generally be described under certain topics. These topics and the material covered will be as follows:

Description

1. History, origins, development, past use, traditions.
2. Formulation, configuration, ingredients, or procedures — including dosage, method of administration, medical or surgical techniques.
3. Mode of operation — hormonal, physiological, chemical, mechanical, surgical, or other.

Evaluation

4. Effectiveness — as a fertility control method, theoretical, actual, including advantages, disadvantages.
5. Side effects — desirable or undesirable, morbidity, mortality, short or long term, physical or psychological.
6. Epidemiology, prevalence, incidence — including not only users (continued users, past users, potential users), but also researchers, trained personnel to perform procedures, supplies, extent of knowledge, literature.
7. Demographic impact — evaluations, evaluation techniques, vital statistics, census data (as relevant to methods).

Production and Distribution

- B. Manufacture — production of drugs, devices,

equipment, or other material necessary to method including costs, techniques, packaging, locations, transportation, and economic factors.

9. Equipment — instrumentation and facilities.
10. Distribution systems — medical, paramedical, post partum, commercial, advertising, information, education, and communication techniques, including information on personnel needed for distribution systems.
11. Training — institutions or programs for training in various methods

Events, Organizations and Publications

12. Special announcements and conferences
13. New organizations, programs, and special publications.

Law and Public Policy

Copies of *Population Reports* will be mailed on request to persons concerned with family planning and population programs throughout the world, especially in developing countries. During 1973, a query will be sent to recipients to determine whether they wish to continue receiving the reports and to solicit suggestions on content and format. A looseleaf notebook for the various reports will be provided to respondents at that time

Lengthy or technical reports on specific techniques, such as laparoscopic female sterilization, may be preceded by a brief non-technical summary suitable for journalistic or magazine use. All reports will be indexed annually.

An information center will also be maintained with the capability of answering specific questions, providing abstracts, preparing bibliographies, and mailing publications to qualified personnel in developing countries.

The Population Information Program is a part of the Biological Sciences Communication Project, Department of Medical and Public Affairs of the George Washington University Medical Center and is supported by the United States Agency for International Development. Inquiries may be addressed to Population Information Program, 2001 S Street, N.W., Washington, D.C. 20009, USA., P. T. Piotrow, Ph.D., Administrator.

UNITED STATES GOVERNMENT

Memorandum

TO : AA/PHA, Mrs. Harriett S. Crowley

DATE: September 29, 1975

FROM : PHA/POP, R. T. Ravenholt

SUBJECT: A Plan of Action for Achieving Village and Household Availability of Contraceptives and Selected Health Medicaments Throughout the Developing World before 1980.

We have given particular thought to how A.I.D. might best and most rapidly proceed to extend minimal family planning services to every village and most households in the developing world during the next five years. And recently in line with Agency and legislative directives we have considered what minimal health services might be "integrated" with such action.

The attached memorandum outlines an approach which we believe can reach the objective of providing these materials and services to the rural poor in the shortest possible time and commensurate with expected resource levels.

Attachment

cc: A/AID D. Parker
DA/AID J. Murphy
AA/PPC P. Birnbaum
AA/TA C. Farrar
AA/NESA R. Nooter
AA/AFR S. Adams
AA/LA H. Kleine
AA/EA A. Gardiner
AA/PHA H. Hendler
A. Furman
PHA/PRS C. D. McMakin
TA/H L. Howard
TA/N M. Forman
OES/ENP N. Green
C. Nelson
P. Claxton
PHA/POP Senior Staff



Memorandum

TO : PHA/POP Senior Staff

FROM : PHA/POP, R. T. Ravenholt

DATE: September 26, 1975



SUBJECT: A Plan of Action for Achieving Village and Household Availability of Contraceptives and Selected Health Medicaments Throughout the Developing World before 1980.

For some years the word "integration" has been a loaded word within AID parlance: a word frequently used to justify transfer of funds from those appropriations earmarked by The Congress "for programs relating to population growth", to various more general health actions, such as construction of medical facilities and employment of general purpose medical personnel.

The Office of Population has vigorously, but not always successfully, resisted misapplication of population funds for such primarily non-family planning health purposes; though we have supported a variety of studies and pilot programs aimed at further defining the cost and personnel implications of various "integrated" approaches to delivery of family planning and health services. In general, these studies and pilot programs have further documented the obvious fact that the more non-family planning actions that are added to family planning programs, the greater the cost per acceptor of family planning services, and the greater the funds and time required to extend family planning services to additional populations.

This principle has inhibited this Office from contributing to multipurpose health programs except as such contributions from population funds were deemed necessary and desirable for attainment of population program objectives. But we have consistently emphasized the need and desirability for insertion of family planning services into existing health services programs as an obvious first step in building national family planning programs. In fact, such "integration" of family planning services with existing health services delivery programs, using population funds for the add on, has been a prominent feature of family planning action in virtually every country; and in Africa and Latin America, where political sensitivities have dictated it; family planning programs have largely been limited to the reach of health services delivery systems.



But in a number of countries, mainly in Asia, we have succeeded in moving rapidly to total country coverage through sales of oral contraceptives and condoms, at very low prices, through tens of thousands of village shops.

Thereby, availability of contraceptives has swiftly multiplied with commensurate rapid increase in utilization.

We are demonstrating that there is a way to go far beyond existing health services delivery systems to rapidly attain country-wide village availability of contraceptives without need for construction of facilities and with minimal requirements for trained personnel (See "Contraceptive Distribution; Taking Supplies to Villages and Households").

But the last several years have brought a confluence of thinking within AID and in the Congress that the U. S. Foreign Assistance Program should give additional emphasis to health and nutrition, as well as to the solution of "problems relating to population growth"; and the word "integration" has gained additional currency.

The Congress is now moving to provide additional monies for both population and health and urging greater integration.

Now it seems timely to set the record straight that the Office of Population does not oppose integration of family planning activities with health and nutrition activities whenever such integration can strengthen program action, and provided there is clarity of purpose, strategy, content, and allocation of costs of such joint or integrated programs.

Many of the key staff of the Office of Population came to the population program from public health programs -- because we believe that direct action toward reduction of excessive fertility and too rapid population growth is the principal key to improvement of the public health in developing countries. We view family planning not as competitive with or subtractive of public health action, but as its most essential element.

Naturally we are highly desirous that action toward solution of other public health problems be accelerated if such action does not block or greatly interfere with our primary mission of reducing excessive fertility and population growth rates.

Now, in the light of recent technological changes, growing experience in delivery of contraceptives to villages and households, strengthened funding for both population and health by the Congress, and Agency policy directives, it seems propitious to move vigorously toward development of an integrated strategy and program with our colleagues in other health programs to achieve availability of not only contraceptives but also a few most essential health medicaments in every village and in most households in the developing world.

Operations Research action has already gone forward in Egypt, Taiwan, Korea and Bangladesh to study the feasibility, costs and effects of delivery of "get acquainted" supplies of oral contraceptives and condoms directly into each household in selected areas. Initial findings are that such action is feasible in each culture, can be done quickly and cheaply, and effects a sudden increase in availability and utilization of contraceptives -- especially in the poorest, most rural and least provident households. For such action, briefly trained distributors are employed at modest wages.

In a sense what we are doing is inverting the usual centrifugal approach to delivery of family planning and health services. Instead of investing great quantities of time and money in construction of facilities and institutions in the urban communities, and in staffing them with highly trained and expensive personnel in the expectation that services will ultimately trickle down to rural areas, we are proceeding in centripetal fashion to get initial family planning supplies and services into villages and households throughout these countries, including the poorest and most rural areas, and working back toward the more costly and time consuming actions which will ultimately be needed for a comprehensive health system offering the highest skills and services.

Rapidly accumulating experience suggests that with the centripetal approach, family planning programs can move quickly from low gear into high gear and general availability and use of contraceptives can be achieved at a low initial distribution cost, which should become a "no distribution cost" as customary availability and use of these materials is established and sales prices are raised sufficiently to defray costs of distribution.

Now what is needed is a clear statement of how the several units of AID might combine their strategies and activities into a more effective whole, while retaining enough definition

of the several parts that each program can be driven with maximal speed and not become hobbled by the inertia of the other parts or of the whole.

Before leaving for Geneva I directed a memorandum to Dr. Lee Howard, Director, Office of Health, AID, soliciting his interest and participation in a joint undertaking (memo of 12 September 1975, attached) and he has since assured me of his enthusiasm for this action.

And while in Geneva last week I discussed this matter with Dr. Albert Zahra, Chief, Family Health Division, WHO, and Dr. Nafis Sadik, Chief, Projects Division, UNFPA, both of whom are engaged in a number of related activities, who expressed their enthusiasm for a joint undertaking to develop Contraceptives/Health Medicament Kits which could be widely distributed in the developing world. The stage is set for definitive action.

I envision a three tier distribution system:

1. A Home Health Kit containing oral contraceptives, condoms, vaginal tampons, aspirin, water purification tablets, antibacterial ointment, antidiarrheal medication, and perhaps certain vitamins and several more medicaments.
2. A larger Retail Display Kit containing appropriate multiples of the above materials, for placement in village shops to facilitate resupply of Home Health Kits by sale of the above materials. These materials would initially be supplied by donors and sold at very low prices. Later, with customary use established, sales prices would be gradually raised toward commercial viability.
3. A larger Primary Health Center Kit containing the above materials plus others such as antibiotics and immunologicals to be dispensed by paramedical workers with appropriate training.

An important component of each kit would be appropriate educational material which would inform the relevant users of each material contained. At the Home Health Kit level, for example, picture-book type directions on the use of the family planning, first aid and other medicines would be necessary. A more extensive set of educational materials would be particularly useful as a part of the Primary Health Center Kit.

The nature of the proposed integrated action and the contents of the Kits suggest that the costs of the Kits and their distribution might be borne equally from population and health funds.

A number of organizations, such as 4-H Club members, farm extension workers, and students, could be enlisted to assist with distribution.

Such an integrated action plan can draw upon a number of related publications, e.g., Boynton's "Manual for Village Health Workers", published by USAID/Vietnam during the 1960s and widely used, and the WHO publications "Promotion of National Health Services" and "Health By The People", both published this year, as well as AID/Office of Health documents.

Organizational Plans

Let us create a Task Force for Village and Household Distribution of Contraceptives and Health Medicaments. The initial meeting of this task force will be held following Staff Conference, 10:00 am, Monday, 29 September 1975, with Office of Health staff participating.

Collection of Materials

The Research and Family Planning Services Divisions with help from the Area Divisions should quickly collect samples of relevant materials, such as the first aid kits by Johnson and Johnson, and other analagous kits now in use in other countries, along with data on their use.

Cost Analysis

An analysis of the cost implications of any proposed material or action and the entire proposed program should be made -- building upon relevant developing world experience to date. We should aim at development of a Home Health Kit which when filled with initial supplies would cost less than \$3 each. The overall costs of the proposed program must be kept within the bounds of fiscal feasibility.

Population Report

It is envisioned that the most efficient way for AID's Offices of Population, Health, and Nutrition, along with UNFPA and WHO, to meld and solidify their views on strategy

and an action plan would be to prepare a Report which when perfected could be broadly distributed in several languages through the Population Information Program at George Washington University, by the World Health Organization and so forth.

Preliminary discussions with UNEPA and WHO last week received their enthusiastic endorsement for this joint action.

In summary, the time is propitious for joining forces more closely with our colleagues in other health fields, to move with greater strength toward our common objectives.

Attachments

Population Reports

SERIES J
NUMBER 5
JULY 1975

FAMILY PLANNING PROGRAMS

Department of Medical and Public Affairs, The George Washington University Medical Center, 2001 S Street, N.W. Washington, D.C. 20009

-Contraceptive Distribution- Taking Supplies to Villages and Households

SUMMARY

For family planning programs in developing countries, the principal challenge today is to reach the rural areas where 80 percent of the population lives. In most of the far-flung villages, widely separated by fields, valleys, rivers, and mountains, medical facilities are few and far between and transportation, at best poor, may be almost nonexistent. There may be only one physician for 10,000 to 100,000 people and even fewer nurses. A field worker in a national family planning program may have to serve as many as 5,000 families. Thus the traditional clinic- or physician-based approach to family planning cannot adequately provide supplies and services for the people.

One answer to this dilemma that is currently being explored in at least a dozen countries is extensive use of village or household distribution points for condoms, foams, and oral contraceptives. It is now recognized that these can be supplied without clinic procedures and with new, more flexible patterns of supervision. Various referred to as community distribution, village and household availability, continuous motivation, contraceptive inundation, commercial distribution, subsidized sales, and social marketing, these new means of distribution have as their objective extending family planning services and supplies beyond the clinics and bringing them directly into the daily lives of the people where they will be easily available to everyone.

Indigenous Programs Vary

Some programs rely on part-time distributors who simply add contraceptive distribution to their usual work. Sometimes the distributors are paid. Sometimes they are volunteers who work as family planning counselors with a church or women's group. Sometimes they are village opinion leaders who operate part-time contraceptive supply centers so that friends can stop by at convenient times for the necessary supplies. The costs of these programs are usually less than costs of traditional clinic programs.

Some programs are established and operated by private family planning associations, but many of the most effective programs are linked to government efforts. In Pakistan, for example, the "contraceptive inundation" program, under government auspices, includes subsidized

This Population Report on contraceptive distribution to villages and households was prepared by Sallie Craig Huber, M.S.P.H., P. T. Piotrow, Ph.D., Malcolm Potts, M.B., B.Chir., Ph.D., Stephen L. Isaacs, J.D., and R. T. Ravenholt, M.D., M.P.H., based on published reports, personal interviews, and correspondence. Co-author Ravenholt, who is Director, Office of Population, US Agency for International Development, provided access to USAID memos and reports.

The assistance of the following reviewers is appreciated: Elizabeth Connell, Bob Curtis, Henry Elkins, Duff Gillespie, Philip Harvey, Kenneth Prussner, Alan Rosenfield, and J. Joseph Spædel. Frances G. Conn is Executive Editor. Comments and additional updated material are welcome.

sales in village shops and door-to-door. The buyer pays only 2½ cents (US) for a cycle of pills or a dozen condoms. In Sri Lanka a subsidized condom marketing plan, now being expanded to include oral contraceptives, was initiated by a private organization, Population Services International, and will be administered by the International Planned Parenthood Federation.

Orals Without Prescription

Objections to distribution of oral contraceptives without medical prescription are being dispelled in a growing number of countries by recognition that serious side effects are rare, that side effects usually cannot be predicted for the individual woman; that effective supervision can be largely delegated to nonphysicians; and that the known benefits of avoiding unwanted pregnancy far outweigh the risks of oral contraception. Several countries, including Pakistan, Bangladesh, and the Philippines, now specifically authorize the distribution of oral contracep-

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tives without a medical prescription. The need for medical help in special circumstances is increasingly being met by referral systems, so that the valuable time of doctors and clinic personnel can be spent on the few difficult cases. Thus, the new distribution systems do not replace existing clinical services; they extend their usefulness. For programs designed to move the most popular and easy-to-use contraceptive methods out of clinics and into villages and households, the major requirements for success are:

- competent and informed supervisors
- dedicated and trained distributors
- adequate contraceptive supplies for every distribution post
- good links with local leaders, private family planning organizations, and family planning and other government officials
- willingness of all involved to put the convenience of the user ahead of the convenience of the provider

Nonclinic distribution efforts designed to make oral contraceptives and condoms familiar household items are well underway in countries as different as Antigua, Brazil, Costa Rica, India, Indonesia, Pakistan, Sri Lanka, Taiwan, and Thailand. Results to date suggest that this approach holds great promise of reaching people who have previously had little or no contact with family planning programs or physician-operated clinics.

HISTORY

Until about 50 years ago, methods of fertility regulation throughout the world were more often a matter of folklore and tradition than of medicine and science. Information was passed from mother to daughter and from father to son while local granny midwives, herbalists, and apothecaries provided various potions to the community. Medical practitioners were involved primarily in performing abortions, which, although usually illegal, were demographically effective, and in dealing with complicated deliveries (46,114).

Commercial distribution of various contraceptive products flourished in the late 19th and in the 20th centuries as people moved to the cities and began to feel the pressures of urban crowding. Local inventors and entrepreneurs, aware of community needs and sales to be made, often both developed and distributed their own products. At least one of these, Rendell's spermicide suppositories, invented by a London chemist in 1885, is still, with modifications, on sale today (67). Peel's study of the British retail trade in contraceptives found that many "rubber"



Fig. 1. "Preathi" condoms are sold alongside many other everyday products in small shops throughout Sri Lanka. (Courtesy of Population Services International)

or "surgical" shops around the turn of the century vigorously promoted and sold condoms, spermicides, and sponges and other vaginal occlusive devices (46,67,68, 114). In 1912 a report from the north of England indicated that contraceptives were on display "in the most bold-faced manner on the counters of local chemists' shops so that no one can miss seeing them." It was said that in one city "on the announcement of a birth in the newspapers, the parents received by post circulars giving very free and unveiled advice and suggestions about the limitation of the family with full particulars of a long series of remedies" (67).

With similar ingenuity and entrepreneurship, in contemporary developing countries folk methods and abortifacients have been devised from locally available materials. Also, mass-produced Western contraceptive products have become increasingly available commercially, although they have not totally displaced folk methods. In 1968 Sollins and Belsky estimated that 40 percent of the modern contraceptive supplies used in developing countries—mainly condoms, spermicides, and oral contraceptives—were distributed by over-the-counter sales (100). Since then, government funded, clinic based programs have been greatly expanded, but the local tobacconist, pharmacist, bazaar or street vendor remains a convenient source of contraceptive supply and advice in most developing countries. The price of the supplies, however—pills are usually \$1.50 (US) or more per cycle—puts them out of reach of many women.

The Role of the Clinic

The first family planning clinic was opened by Dr. Aletta Jacobs in Holland in 1882 to provide some privacy and a place where a trained person could fit a woman with the proper size cervical cap or diaphragm. Dr. Jacobs' clinic served as a model for Margaret Sanger's clinic in the USA and Marie Stopes' in the United Kingdom, and established a pattern associating clinical examination and care with the use of the diaphragm (92,104,114).

The shift from over-the-counter sales to clinics and greater medical involvement in the distribution of contraceptives came about not only in response to new methods like the diaphragm and cap, but also as a reaction against the public commercial promotion of ineffective or even dangerous products and because of religious censure of family planning. To insure acceptance of the concept of family planning, birth control services came to be provided by physicians in clinical facilities—usually private offices or maternal and child health centers—where they were associated with routine medical care.

sically limited in their ability to serve widely dispersed populations (18,60). Secondly, in some cultures women are embarrassed by clinic procedures. they may find the clinic intimidating or be nervous in the presence of an unfamiliar, highly educated physician who asks personal questions and performs vaginal or pelvic examinations. Also, they may be reluctant to be seen attending the clinic by other women (93,98). Thirdly, clinical programs are often limited by shortages of money and medical personnel and administrative backup, especially in developing countries and in rural areas. Fourthly, in a clinic setting family planning often receives second priority to more immediate needs for curative health care.

Laudable efforts have been made in recent years to adapt the clinic system to meet more effectively the needs of the communities they serve. Mobile clinics are one approach (6,48,64). Extensive use of paramedical personnel, intended to make clinics more efficient and economical, is another. Paramedics can distribute oral contraceptives, provide contraceptive and abortion counseling, and insert IUDs. In both developed and developing countries the role of the paraprofessional is expanding, and evaluations show that paraprofessionals are indeed effective in providing family planning services (11,65,66,86,87,88, 111,115).

Clinics are adapting to better meet the needs of the community by providing abortion and sterilization services, which traditionally have been performed in hospitals by trained physicians. Nonhospital, outpatient abortion clinics are now providing safe, rapid, and relatively inexpensive early abortions. Male sterilizations are available in settings as varied as railway stations, churches, mass vasectomy camps, private physicians' offices, and clinics originally established to perform legal abortions (5). Even female sterilization, a more complex and potentially more hazardous procedure, is being performed on an outpatient basis under local anesthesia in both developed and developing countries in mobile field facilities as well as stationary clinics (63).

Nonclinical Distribution

While new clinic models are being developed, so, too, are new contraceptive distribution systems that do not require large investments of medical time or skill. One of the first efforts to make contraceptives more readily available in villages and households began in 1959 in Puerto Rico. In an island-wide program sponsored by the private Family Planning Association, community leader volunteers distributed in their own neighborhoods contraceptive foam free of charge (4). In India the Gandhigram Institute of Rural Health and Family Planning established a village based system of contraceptive distribution in the early 1960s. Village residents were selected and trained to distribute conventional contraceptives using their homes as supply points. These distributors also referred individuals who wanted IUDs or surgical sterilizations to area clinics (71).

As early as 1961, village women in Comilla, East Pakistan (now Bangladesh), were selected to sell condoms and foaming tablets door to door. Three years later an additional community distribution project began involving sales of the same methods for profit in small retail shops (2),102).

Mothers' clubs, formed in Korean villages by family planning workers in the late 1960s, have played a key role in the distribution of contraceptive supplies there. Club members distribute pills and condoms to women in their village and help to encourage other village women to use contraceptives (85).

Some of the early programs had to cope not only with personnel, supply, and logistics problems but also with the hostility of the populace toward family planning. After a decade of effort, however, this hostility has been eliminated in most countries. Thus, current efforts to make contraceptive supplies available can operate in an environment of acceptance and support which enhance prospects for program success.

CONTRACEPTIVE DISTRIBUTION PROGRAM COMPONENTS

Village and household oriented family planning distribution programs exist today in many different forms and in many different countries. A shopkeeper in Sri Lanka or Pakistan, a housewife in Colombia, a school teacher in Brazil, a traditional entertainer in Thailand, a "barefoot doctor" in China—all belong to indigenous distribution networks. These networks are:

- closely linked to the life of the community
- geographically convenient
- culturally acceptable
- designed especially to suit the convenience of the user.

A basic premise of these programs is that products or services that are readily available are more likely to be used than those which entail effort, expense, inconvenience, or embarrassment to obtain. A further premise is that familiar and regular contacts with the supplier provide a constant reminder to continue using the product. Thus, village and even house-to-house distribution are not radical departures from but a necessary complement to clinic programs. In fact, many of these programs either began as a clinic-outreach effort or quickly developed a system for referral to existing clinics. In this way clients with medical problems such as troublesome side effects from contraceptives, or who want a clinical method such as an IUD, sterilization, or abortion, can receive further attention.

Whatever their origin, these programs all have five major components, each of which can be adapted to suit the local situation. These are:

- personnel
- training
- contraceptive supplies
- information and education
- evaluation

Personnel

An effective contraceptive distribution program requires strong leadership. Supervisors usually are carefully selected, highly competent, full-time family planning workers who perform all or most of the following tasks:

- select, train, and oversee distributors
- educate village leaders and groups and answer questions about methods and supplies

Medical supervision was also considered appropriate and necessary for the care of the IUD user. Early suspicions that IUDs carried a great risk of introducing bacteria into the uterus were difficult to overcome. Even those who favored IUDs felt it necessary at first to have the devices inserted only by physicians and only in clinical settings (34,51,94).

When oral contraceptives were first introduced, beginning around 1960, the formulations were relatively strong and the likelihood of severe side effects was unknown. All women using them were therefore advised to remain under close medical supervision (see Population Report A-2). Now time has passed, the hormonal content of the pill has been decreased, and the relative safety of these preparations has been widely studied and measured (8,50,79,86,87,88,96,101). In addition, it has become increasingly clear that there are too few medical personnel and facilities in the world to provide pills according to a strict clinical protocol to all women who want or might benefit from oral contraceptives (53) (see Table 1).

Family planning clinics, whether integrated with other health facilities or operating as free-standing units, have both advantages and disadvantages. Since they involve medical personnel within a fixed facility, they can offer a high level of care and multiple services, supplies, and equipment. They provide a measure of privacy and medical confidentiality. Also, since the medical profession is generally held in high esteem, a clinic setting can minimize controversy or political repercussions in countries where family planning is not yet fully accepted.

On the other hand, family planning clinics have certain disadvantages (103). Firstly, users must travel to the premises, which are usually open only during certain hours. Repeated visits for advice or supplies may be necessary. This involves transportation costs, providing for the care of children or dependents, losing time from work, and long waits at the clinic. Since attendance at health and family planning facilities depends on how close the client lives to the clinic, stationary clinic facilities are intrinsic

Table 1—Population per Physician and per Hospital Bed in Selected Countries

Country	Year	Population per Doctor	Year	Population per Hospital Bed
AFRICA				
Egypt	1969	2,004	1968-69	472
Ghana	1969	15,200 ^a	1970	793
Kenya	1969	8,718 ^a	1967	750
Mauritius	1970	4,091	1970	248
Nigeria	1968	24,032 ^a	1968	1,867
Sierra Leone	1969	16,299	1970	1,020
NORTH AMERICA				
Canada	1969	700	1968	98
Costa Rica	1969	1,807	1970	249
El Salvador	1969	3,919	1969	476
Jamaica	1970	2,817	1970	261
Nicaragua	1969	1,874	1969	433
USA	1969	669	1969	123
SOUTH AMERICA				
Bolivia	1970	2,301	1970	522
Brazil	1969	1,953	1967	294
Ecuador	1967	2,767	1969	473
Guyana	1969	3,814	1970	225
Uruguay	1967	1,042	1969	162
Venezuela	1970	1,098	1970	316
ASIA				
Afghanistan	1969	20,668	1969	6,756
Indonesia	1967	27,561	1968	1,484
Japan	1969	898	1970	79
Pakistan	1969	5,350 ^a	1968	2,570
Philippines	1969	9,840 ^b	1969	822
Thailand	1969	8,406	1969	972
Turkey	1970	2,222	1970	489
EUROPE				
Bulgaria	1970	537	1970	129
France	1970	747	1969	113
Norway	1970	727	1969	109
Spain	1969	755	1968	218
U.K. (England & Wales)	1967	855	1969	106 ^c
USSR	1969	433	1969	94
Yugoslavia	1970	1,000	1970	177
OCEANIA				
Australia	1966	847	1969	83
Fiji	1970	2,122	1970	344
New Zealand	1968	633 ^a	1970	98
Western Samoa	1970	3,000	1970	291

Source: United Nations Statistical Yearbook 1971

^aRegistered doctors only

^bGovernment service or Ministry of Health only

^cGovernment establishments only

- supply contraceptives to distributors
- keep records on inventory, distribution, funds, and performance
- receive and pay out cash if supplies are sold
- provide assistance or referral, if necessary, for people who have problems with the methods selected or who want to use other methods

Distributors, on the other hand, are usually local people with varying education and experience who perform all or most of the following tasks

- convey contraceptives to retailers, households, and/or individuals
- provide information, recruit program participants, and teach correct use of contraceptives
- answer questions and refer clients who desire alternative (clinical) methods of family planning
- resupply established users
- keep basic records on supplies and use
- deal with or refer clients who have problems with chosen methods to appropriate sources of assistance

In some programs distributors gather basic demographic data and/or carry on extensive educational work as well as supply contraceptives. Distributors can be rewarded for their efforts in various ways. They may keep all the money from sales or only a portion, turning over the remainder to the program. In some systems, especially those which work through church or women's groups, the distributors work as volunteers without compensation.

Training

The training of both supervisors and distributors is important to the success of nonclinical distribution programs. Basically, training should be designed to familiarize workers with the nature of the program, family planning methods, distribution of contraceptives, potential side effects, and record keeping. Many training techniques can be used: for example, lecture, discussion, and even role-playing, which helps prepare program workers for situations they will encounter on the job.

The training period for supervisors usually lasts from one week to one month, with refresher courses provided every six months or once a year. Although most supervisors will already have a substantial health or medical background, they are likely to receive further instruction in reproductive biology, basic demography, and human relationships.

Distributors, on the other hand, generally receive from one day's to two weeks' training before they begin to distribute contraceptives. This basic orientation should be supplemented by in-service training, either informally, at the time of a supervisor's visit, or through periodic sessions devoted entirely to instruction.

Contraceptive Supplies

Community distribution systems necessarily emphasize nonclinical methods, that is, those which require little or no medical involvement. Condoms, spermicides, and oral contraceptives are well suited to extensive distribution. IUD insertion, sterilization, and abortion, on the other hand, are clinical procedures, although information about them can be conveyed by the same people who distribute the simpler methods.

A crucial element in these distribution systems is an adequate supply of contraceptives. Experience in many

countries during the last decade has revealed that assuring abundant supplies of contraceptives at the village and household level is a major logistical task that is not usually accomplished until a program has been operating for a number of years. *Not until ample working supplies of contraceptives are on hand can distribution programs achieve general availability* (78).

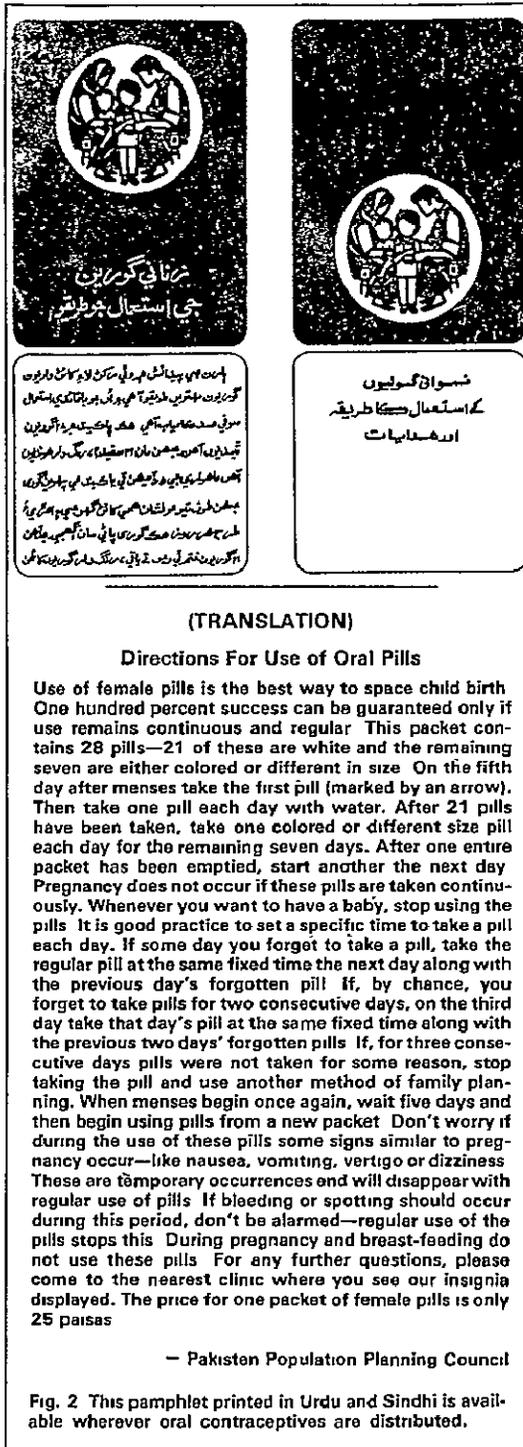


Fig. 2 This pamphlet printed in Urdu and Sindhi is available wherever oral contraceptives are distributed.

The United States Agency for International Development and public health officials calculate that appropriate initial supply goals for a program's first year of operations are: a year's supply of oral contraceptives for 10 percent of the women aged 15-49, a year's supply of condoms for 5 percent of the men of equivalent age, and a year's supply of spermicides for 1 percent of the women aged 15-49 (108) In a country of 100 million people, for example, the required initial order of oral contraceptives is

100,000,000 (total population) X 20 percent (approximate percentage of women aged 15-49) X 10 percent (goal for 1st year) X 13 (cycles per woman per year) = 26 million cycles

At a cost of \$0 20 (US) per cycle, this would amount to \$5 2 million (US) for the first year (108) A similar supply should be ordered for the second year, and thereafter orders should be adjusted to the rates and trends of utilization (52)

The initial order of condoms for the same population is

100,000,000 (total population) X 20 percent (approximate percentage of men aged 15-49) X 5 percent (goal for 1st year) X 100 (condoms per man per year) = 100 million condoms.

At a cost of \$0 03 (US) per condom this would amount to \$3 million (US) for the first year (108)

Currently, intense demand for contraceptives in countries like Bangladesh and Pakistan is reflected in black-market prices for oral contraceptives that are as much as 10 times higher than the subsidized price (57) Black markets, although sometimes criticized by auditors or donors, actually are proof of intense demand for contraceptives. They are not intrinsically bad, but they can be obliterated by making available an abundance of contraceptives to meet demand fully Program administrators must be encouraged to order abundant supplies and to distribute them generously Establishment and maintenance of adequate supply lines require farsighted action by many parties larger budgets for population and family planning must be obtained by both donor and developing country agencies, larger proportions of those budgets must be allocated for purchase of contraceptives, and adequate working supplies of contraceptives must be made available for distribution to individuals before utilization of contraceptives can guide further purchase and distribution. To move more strongly in this direction USAID officials are budgeting more than \$40 million for contraceptives in fiscal year 1976 (108) and are urging other donor agencies, the United Nations, and the governments of developing countries to give higher priority to assuring adequate working supplies of contraceptives

The condom is the simplest contraceptive to distribute in a community-based system. In countries where men make most of the domestic decisions, the condom is usually more popular than methods for women (24) The condom is fairly effective, easy to use, traditionally available from nonmedical sources, and has the added advantage of helping to prevent venereal disease (see Population Reports H-1 and H-2) Although the manufacture of rubber condoms is a moderately complex process, they are now being made in several developing countries, including India, Korea, and Thailand, and plans are underway for their manufacture in Pakistan and Indonesia.

Spermicides, including aerosol foam and foaming tablets, which are not quite as effective as condoms in preventing pregnancy, are also sold through commercial channels (10) A very early program in Puerto Rico involved door-to-door distribution of foam at no cost to acceptors (4) In Africa many men are buying foam, presumably because they prefer that the women use foam rather than that they use condoms (107) The long-term demand for spermicides in developing countries has not been fully explored and may be greater than currently recognized (10) Spermicides cost slightly more than either condoms or pills, but spermicides may be preferred if sexual relations are infrequent.

Like condoms and spermicides, oral contraceptives have great potential for village and household distribution, but there is still debate over what degree of medical supervision is necessary. Recently extensive studies in the United Kingdom (91) and the United States (77) have helped put the side effects of oral contraceptives into better perspective and have highlighted beneficial effects as well as the few harmful side-effects Unfortunately, it is usually impossible, even after taking a careful medical history and doing a complete physical examination, to predict which individual woman is at risk of side effects (2,8,75, 79,97,101)

The Central Medical Committee of the International Planned Parenthood Federation recommended in April 1973 that "responsible, simple methods of nonmedical distribution of oral contraceptives can and should be devised" (53) In the last three years at least eight countries, including Antigua, Bangladesh, Chile, Fiji, Jamaica, Pakistan, the Philippines, and South Korea, have eliminated prescription requirements for oral contraceptives (35), several other governments including Ghana are considering similar action. In the Peoples Republic of China as well as in many Latin American countries, oral contraceptives are readily available without medical prescription In Britain, following a forceful recommendation from a number of British medical leaders, the Minister of Health in April 1975 appointed an ad-hoc committee to consider removing the requirement of a physician's prescription for pills Nurses, midwives, and other health personnel, working under the indirect guidance of doctors, have been suggested as distributors (2,97) This emerging consensus is giving powerful impetus to nonclinical community distribution projects in many countries

The rhythm method, or periodic abstinence, although of limited effectiveness, can also be taught and encouraged through community networks, especially by other couples who have used the method successfully. In the Philippines and Mauritius, as well as in the USA and Canada, such programs have been operating for several years with some success (16,58,90,116) Guidance and encouragement are provided, usually by volunteer couples who meet frequently with other users, answer questions, and recruit new couples. The rhythm method is difficult to use successfully, and social networks intended to help couples learn and continue using it must be exceptionally strong

The family planning distribution network should have as much medical backup as possible. Any woman using oral contraceptives, for example, who feels apprehensive and wants a medical consultation—thinks she has diabetes, tuberculosis, or liver disease, has pain or swelling in the

legs, complaints of any visual changes; or who has jaundice, persistent severe headaches, or vaginal bleeding after intercourse—should be referred to the most competent health personnel available. Of course, these and other troublesome symptoms and diseases occur among women who use other methods or no contraception at all, but prompt attention by trained personnel not only will identify real problems, but also will allay individual concerns and prevent unfounded rumors and misunderstandings.

Information and Education

Any distribution system requires informing would-be users about what products are available, and where, when, how, and at what price they can be obtained. Beyond these essentials, additional information about the benefits of family planning and the advantages and disadvantages of the various methods is usually appropriate. Often the most important information that can be conveyed about a product is a sample of the product itself, with appropriate packaging and labeling.

In the earliest family planning projects, the most persuasive information was conveyed by word of mouth (59,89). As the subject has become more familiar and respectable, posters, radio announcements, puppet shows, films, and various other mass media have also helped to increase awareness of and to promote the practice of contraception. For commercial distribution, advertising is necessary for the creation of large markets with high sales volume in order to provide a high return to the retailer despite a reasonably low price for the consumer. Professional advertising skills are available in nearly all countries and represent an important, largely untapped potential in family planning education (61). It is likely, for some time at least, that governments or other agencies will have to subsidize information and publicity as well as the contraceptives themselves, even though a small user charge may cover most of the direct distribution costs (7).

Similarly, with noncommercial programs that include existing institutions, supply depots, or household distribution, information need not be restricted to word-of-mouth recommendations. All channels of communication in the community can be utilized. In some villages in Indonesia, for instance, women are reminded to take their oral contraceptive by a special "family planning message" sounded on the village drum each day at sundown (22). In the Philippines, the members of *Iglesia ni Cristo* hear sermons that encourage the practice of family planning and assure them that it is morally and socially acceptable (37,49).

Evaluation

Despite differences in method of evaluation from one country to another, all are concerned with three types of information:

- data on program inputs and outputs, including the number of distribution points in the system, the quantity of supplies delivered and/or sold, the number of new acceptors of each method per specified time period, and the prevalence of use of each method at specified points in time.
- descriptive data on the characteristics of acceptors, including age, parity, methods used, followup and cost/effectiveness of the program.
- demographic data which measure program impact, especially monthly or at least annual fertility rates

The first type of data can be taken from simple records maintained by distributors and supervisors. The second and third types can be gathered only after the program has been in operation for some time.

In distribution systems based on institutions or village supply points, data for evaluation can be extracted from simple records that give the name, age, and address of each acceptor and the kind and quantity of contraceptives dispensed. The information about contraceptives can be collected either as tabulations on charts or by a simple count of the coupons collected with each distribution of contraceptives. Collecting data in programs which sell contraceptives requires a different approach. For example, names and addresses of customers are not recorded, but sales records should be available. Door-to-door programs, whether for sales or free distribution of contraceptives, can provide detailed demographic data for census and other purposes along with family planning program information.

Types of Programs

These five program components can be combined in various ways to meet community needs. Programs now in existence can be divided into four broad categories:

- subsidized sales of contraceptives through established retail outlets or directly to households
- distribution through churches, banks, and other institutions involved in various aspects of community life
- community or village distribution by residents who serve as suppliers
- household distribution, or provision of contraceptives door-to-door to anyone interested

SUBSIDIZED SALES

From the consumer's point of view there is little difference between the subsidized sales of contraceptives and ordinary commercial sales except for the price. Both involve distribution through established retail outlets, but in subsidized programs contraceptives are sold at a price adjusted to increase sales to the community rather than to cover the full cost of the commodity, its promotion and distribution. This is possible because the government or some other donor subsidizes the cost of the product provided free or sold to the wholesaler and/or retailer. It is intended that the low sales price will eventually generate a high volume of sales and thus provide a satisfactory return to the retailer. Considerable external funds for advertising and commercial promotion may be needed, at least initially, to stimulate sales (7,13,61).

Subsidized sales programs can be administered either by the government, as in Pakistan, India, and Ghana, or by private organizations, as in Costa Rica, Kenya, and Sri Lanka. Programs make use of existing retail shops or recruit special personnel for door-to-door sales. Prices can be as low as 2 or 3 cents (US) for a dozen condoms or as high as 15 to 20 cents (US) per condom for luxury brands. Programs can be nationwide or regional. To date, condoms, pills, and sometimes spermicides have been distributed through subsidized programs.

Table 2—Number of Health Facilities and Registered Rural Retail Outlets, Kenya, 1969

Health Facility	Number	Retail Outlet	Number
Health Centers	200	Pharmacies	45
Dispensaries	400	Food, tobacco, drink retailers	4,386
Government & mission hospitals	199	General retailers	16,685
Total	799	Total	21,116

SOURCE Black (12)

The advantages of subsidizing commercial sales are numerous. In any country the number of retail outlets far exceeds the actual or even the potential number of clinics (see Table 2). Existing distributors and advertising firms can be used without establishing an extensive administrative bureaucracy. Therefore, distribution costs should be well below the costs of dispensing the same contraceptives in clinical programs. Evaluation is simple because distribution and sales figures provide a readily available indication of contraceptive coverage.

On the other hand, there are also disadvantages. If inadequately subsidized, the product may be too expensive for the poorest segment of the population. Also, because subsidized sales compete with ordinary commercial sales, drug manufacturers and retailers will often seek to inhibit the full operation of a subsidized sales program. Some retailers may prefer a high mark-up on a low volume of sales to a low mark-up on a high volume.

Costa Rica

In Costa Rica under direction of the National Population Council (CONAPO), close collaboration exists between the public and private agencies responsible for family planning. The Ministry of Health offers family planning services in more than 100 health centers. A woman selecting oral contraceptives at a government health center is given from one to six blue or green coupons which can be redeemed at any of 150 or so participating pharmacies. Ninety-five percent of the women are issued blue coupons, each good for the purchase of one cycle of orals at \$0.35 (US). This compares with a market price of \$1.50 to \$2.50 (US). If the social worker at the clinic determines that a woman cannot afford to pay even 35 cents, the client receives green coupons which entitle her to free pills. When all her coupons are used, the woman returns to the family planning clinic for additional coupons and for consultation (55).

The Costa Rican Demographic Association, a private family planning organization, receives free oral contraceptives from the International Planned Parenthood Federation. It sells them to the drugstores for 28 cents (US) per cycle, retaining the proceeds for other program uses. The pharmacy makes seven cents' profit on each cycle of pills sold (55).

Although the pharmacy program in Costa Rica has not been formally evaluated, it appears to have contributed to the recent decline in Costa Rica's birth rate, especially in urban areas. It has not yet achieved adequate availability and utilization of contraceptives by the poorest women,

especially in rural areas, however, and the two-step coupon system may discourage many women from getting the pills they need.

Antigua

Antigua Planned Parenthood Association, a private family planning association, has established a subsidized contraceptive sales program utilizing pharmacies and other convenient retail outlets. As in Costa Rica, the program is based on a coupon system intended to minimize disruption of normal commercial sales.

Although like the Costa Rican program in many respects, the Antigua program differs in others. Contraceptives for both males and females are subsidized. Furthermore, any adult can buy subsidized contraceptives directly, without coupons, from about 25 designated pharmacies and retail stores. The cooperating stores sell a cycle of pills for \$1.00 (US), 25 cents of which is kept by the retailer. (Although one-third less than the commercial price, a \$1.00 (US) price is more than many women in developing countries can afford.) Condoms sell for 15 cents (US) a three-pack, from which five cents is retained by the retailers.

If the would-be purchaser finds the cost still prohibitive, he or she can stop at any of 17 locations—health centers, nurses' offices or union headquarters—to pick up coupons redeemable for contraceptives at the stores. Stores accept one coupon plus 25 cents for a cycle of pills or 24 condoms. The retailer retains the whole 25 cents as profit (55). For those unable to pay even the 25 cents, special arrangements have been made so that they can receive pills or condoms free from the retail stores (56). The Antigua Planned Parenthood Association obtains the contraceptives free from IPPF.

Nationally broadcast radio messages promote the program, and retailers display counter-top signs and sometimes family planning posters. Village nurses and staff members of the family planning association do person-to-person educational work in the community.

A baseline survey in May 1973 and a follow-up study late in 1974 revealed that, although knowledge of contraception had increased in Antigua between 1973 and 1974, the new channels of distribution were not well known and contraceptive use had, in fact, decreased somewhat (55). A second and more precise field evaluation noted that (1) distribution of only one coupon at each visit forced the acceptor to make two trips for each monthly supply of contraceptives, one to pick up a coupon and another to get supplies, (2) advertising failed to provide specific enough information about methods, sales locations, and prices; (3) retailers and coupon distributors were not adequately supervised, and (4) import and sales taxes imposed by the government caused higher than necessary prices. The program evaluators judged the program to be conceptually sound, however, and these problems are now being corrected (55).

India

The *Nirodh* (condom) program in India was a prototype for subsidized marketing of contraceptives. A government sponsored effort, the program distributed condoms through several companies with established distribution networks for tea, soap, and other items to retailers, mainly in large and medium sized cities (24). The program

reached a peak in fiscal year 1974 when 116 million condoms were sold—that is, a year's contraceptive protection for slightly more than a million couples (109). This peak in sales was reached one year after an extensive advertising and publicity campaign.

In October 1974 the Government of India increased the price of three condoms from two to three cents (US). Also, the advertising budget for fiscal 1974 was cut in half. In 1975 government funds for advertising were discontinued and responsibility for publicity was transferred to the Mass Education and Media Division of the government family planning program (43). As a result of these program changes, Nirodh sales for fiscal year 1975 were estimated at about 60 million condoms, or half the 1974 level (42). The decline in sales may also be due to the fact that Nirodh condoms are neither lubricated nor colored and thus have less user appeal than the newer types. The Nirodh experience suggests that government funded marketing activities can be successful but that improved contraceptives and substantial promotion are needed in addition to subsidization.

Kenya

The Kenya program, launched in 1972, is identified with the bright pink package of the *Kinga* condom, which was sold initially through a pilot project in one district. Developed and implemented by a private firm, Population Services International (PSI), the program was based on market surveys, advertising, and vigorous promotional campaigns (24). Sales increased rapidly during the first year but the project was limited to a single district until late 1974 when a number of new districts and cities were added (44). The government of Kenya has not yet given its approval for a nationwide effort.

According to PSI the program is currently operating without government financial support but with a private subsidy of about \$25,000 (US) per year. Sales have now reached about one-half million condoms per year. Various brands sell at prices ranging from 5 to 20 cents (US) per condom (43). If the *Kinga* project continues, it will be a useful test of whether a private, nongovernmental marketing plan can maintain itself without financial backing from either an international donor organization or the national government.

Sri Lanka

Subsidized condom sales in Sri Lanka began in 1973 under the direction of Population Services International with the support of the International Planned Parenthood Federation. The condoms were marketed under the brand name *Preethi*, which means "happiness" in the two local languages. During the first 18 months of the program, an estimated 5.1 million condoms were sold through over 4,000 small shops (see Fig 1) at a cost of four cents (US) and by mail at five cents for a package of three condoms or were distributed as samples. Currently, distribution is averaging about 300,000 condoms per month. PSI estimates that 60,000 couples are now using *Preethi* (31). Less than one year after this program began, a survey of men aged 15-50 in Sri Lanka revealed that 88 percent knew about *Preethi*, 66 percent approved of the sales campaign, 13 percent were actually using condoms, and, of these, 70 percent were using *Preethi* (72).

A second phase of this program began in December 1974. It involves direct advertising of oral contraceptives, called

Mithuri, meaning "woman's friend," to women and to physicians and licensed pharmacists who might prescribe and/or distribute it. At this point, data with which to evaluate the project are few. During the first three months of this pilot project, 357 women purchased *Mithuri* either directly from private physicians, from licensed pharmacists by means of a preprinted prescription signed by a physician, or by mail from Population Services International Packets containing two cycles of *Mithuri*—cost \$0.29 (US). This compares with a price of \$0.45-0.65 (US) per cycle for other oral contraceptives sold by doctors and chemists in Sri Lanka. Approximately 80 percent of these 357 women were thought to be using oral contraceptives for the first time (30,32).

The pill project has had full support from physicians in Sri Lanka. It will become national in scope in mid-1975 when the management of both the *Preethi* and *Mithuri* schemes will be taken over by the Community Based Distribution Department of the International Planned Parenthood Federation (32).

Pakistan

The government of Pakistan, with assistance from the US Agency for International Development, has mounted a multifaceted effort to make contraceptives much more available throughout the country. Basically a subsidized sales scheme, the program utilizes both village shops and door-to-door distributors to sell orals and condoms. The new program began with modifications of the old, clinic based delivery system in September 1973, shortly after Pakistan dropped the prescription requirement for oral contraceptives. With the rapid increase in the number of outlets and the quantity of contraceptives available, this program, officially named the Expanded Population Planning Scheme, became known as the Contraceptive Inundation Scheme. The United Nations, Norway, West Germany, the United Kingdom, and Australia have also come forward with assistance (95).

The door-to-door distribution teams, each, ideally, comprised of one man and one woman, both high school graduates, are recruited from the area they will serve—usually a population of about 10,000 with 1,200 to 1,500 fertile couples. To interested householders the distribution teams sell pills at 2½ cents (US) a cycle or a dozen lubricated condoms for the same price (62,105). The money goes to the government. Included in the duties of the distribution teams are demographic registration, family planning education, and referral to the nearest clinic or hospital of couples interested in the IUD or in sterilization. Each distributor is paid the equivalent of \$20 (US) per month from the program budget. The staff of distributors has grown from about 1,600 in 1973 to 8,500 by mid-1975. They now serve about 74 percent of the population, concentrating on the most densely inhabited areas (62).

As well as distributing to households, the male partner in the team enlists keepers of small shops to sell contraceptives. Some 35,000 shops—pharmacies, tea stalls, general provision stores, and others—are currently registered to sell pills and condoms. The shopkeepers keep 40 percent of the price paid for the contraceptives; the remainder goes to the government. It is estimated that by the end of 1975 there will be at least one commercial supplier in each of Pakistan's more than 40,000 villages (6,106).

Also part of the scheme are some 700-Family Welfare Clinics, which employ female high school graduates trained to insert IUDs, and provide oral contraceptives and condoms as well as simple medicines, all free of charge. Program employees also do educational work and distribute contraceptive supplies at approximately 400 government hospitals and at the 40 hospitals which operate postpartum family planning programs. In addition, some 2,000 cooperating physicians are provided orals and condoms by the government for free distribution to patients (62).

Radio advertising for the program mentions contraceptives by name and tells where they can be purchased. A simple pamphlet explaining the use of orals in both Urdu and Sindhi has been prepared by the Pakistan Population Planning Council and is distributed wherever pills are available (62) (see Fig. 2)

The value of using multiple distribution methods is reflected in statistics from the Pakistan program. In July 1974, 146,000 cycles of pills and 2.9 million condoms were sold; in May 1975, monthly sales had reached 293,000 cycles of orals and 9.4 million condoms (105,106)

Ghana

In Ghana, government subsidized sales of contraceptives began in 1971. The Ghana program promotes the sales of both condoms and foams through about 600 licensed pharmacies and the sale of condoms alone through an additional 1,500 outlets. The Ghana National Trading Corporation is the sales distributor. An early publicity campaign, which had the approval of an advisory board (including clergymen), evoked protest and had to be discontinued (41). Despite the lack of publicity, in the fiscal year ending June 1972, sales of foams totaled 120,000 bottles. Condom sales, however, reached only a half million pieces (41).

Since then, sales of aerosol foams such as Emko and Delfen have increased steadily. Many purchasers of aerosol foams are men, who buy the contraceptive for women because they prefer it to using condoms themselves (107). This mirrors the situation in Japan, where women often buy condoms for use by men (73).

The government of Ghana provides continuing support to the program and is now planning a more comprehensive distribution project utilizing both public and private distribution points in two regions of northern Ghana. This project will be similar to the "contraceptive inundation" program in Pakistan and is expected to start in 1975.

Indonesia

A subsidized distribution scheme has just been initiated in Indonesia under the guidance of the *Yayasan Indonesia Sejahtera* (Prosperous Indonesia Foundation), founded in 1974 "to stimulate development and to review and evaluate innovative, nonclinical contraceptive delivery systems." The organization provides condoms through *jamu*, Indonesia's extensive system of herbal medicine distribution (1,45,70).

Jamu, which for years has pervaded traditional Indonesian medical care, recently has modernized its manufacturing and distribution processes to promote sales for profit. Its approximately 100 products are popular throughout In-

onesia. About half are "sex-related, serving as either cosmetics or aphrodisiacs" (45). To initiate the addition of condoms to this network, a small grant was supplied to *Yayasan Indonesia Sejahtera* by World Neighbors, a private voluntary organization.

Condoms donated by the US Agency for International Development are given to the foundation free of charge by the Indonesia National Family Planning Coordinating Board. They are then sold by *Yayasan Indonesia Sejahtera* to a large *jamu* manufacturer at a cost of about \$0.015 (US) for three condoms. The manufacturer repackages the product in distinctive promotional wrappings which, like his other *jamu* products, bear the symbol of a rooster. He then distributes them through wholesalers to about 40,000-50,000 *jamu* retailers. A slight profit is made at each step, but the end product sells to the consumer for only about \$0.05 (US) for three condoms—a price comparable to other *jamu* products and well within reach of most Indonesians (1,45,70).

While it is still too early to determine how successful the program will be, it combines the advantages of commercial sales techniques similar to those used in developed countries like Sweden, Germany, and Japan with a distribution concept well rooted in Indonesian community traditions and practice. If the program were expanded to include oral contraceptives in the network, its impact might be further enhanced (110).

INSTITUTIONAL DISTRIBUTION

Contraceptives can also be distributed through existing community institutions such as churches, clubs, factories, trade unions, banks, and organizations of school teachers. Members of these groups work together, play together, worship together, and participate in other group activities. They share interests and develop a sense of social solidarity. If their leaders become interested in family planning, it is likely that the group will also, and sometimes a leader's involvement will lead to promotional activities within the context of the group's regular activities. In this way individuals who might never have learned about family planning will become aware and involved. Institutional distribution has its limitations, however. Individuals who are not members of the group may not be reached by family planning information and services. Also, some individuals may resent the strong social pressures of the group and oppose the program.

Family Planning International Assistance (FPIA) of the Planned Parenthood Federation of America, in cooperation with Church World Service and with funding from USAID, is assisting in pilot programs testing institutional distribution.

Philippines

In the Philippines two nonhealth institutions which are encouraging and providing family planning at the community level are the *Iglesia ni Cristo* (Church of Christ), an indigenous religious movement, and the Rural Bank of San Luis. Despite their different approaches to family planning, both have established successful programs.

The *Iglesia ni Cristo*, an evangelical religious organization with a membership of about 4.4 million, or 10 percent of the

total Philippine population, began offering comprehensive family planning services to its members in 1973 through medical teams that traveled throughout the country. After outstanding initial success, the program ran into trouble. In the fall of 1974 vehicles broke down and failed to meet their schedules, remote areas were left with limited or no medical personnel. After rethinking the program, the medical director decided to establish a pilot project using paramedical volunteers to distribute oral contraceptives. These distributors, who now number 212, were recruited from among church members to work in their own communities in a single province. After a one-day seminar on family planning and one week of field training which emphasized the pill, the distributors were assigned areas and sent out to work at least five hours each week. Between October 1974 and March 1975—the first five months—the distributors recruited 11,718 new acceptors, 76.5 percent of whom selected pills. The remainder chose to use condoms or rhythm. During that same period, distributors made more than 5,000 return visits, and more than 5,000 users were shifted from less effective to more effective methods (38,39).

The initial success of the pilot project encouraged the Iglesia ni Cristo to extend its use of trained volunteer distributors. In March 1975 there were about 100 distributors working in each of seven other provinces. None of the distributors receives a salary, but they are reimbursed for transportation costs. During a home visit each acceptor receives three cycles of pills or 12 condoms free of charge. The program cost per acceptor is estimated at about \$2.50 (US) (38,39). Pills are also distributed at the churches on Sundays, on Thursday nights when prayer meetings are held, and at the monthly meetings of the Married Couples' Association (74).

The program run by the Rural Bank of San Luis, called "Special Integrated Financing," offers low interest loans to farmers who improve sanitation, plant vegetable gardens, or initiate other developmental projects, and who, in addition, have no children during the year. The Bank is planning to distribute contraceptive supplies and services to loan holders at their facilities. This will be done with help from the national Institute of Maternal and Child Health (112). Initially funded by World Neighbors, the program is self-supporting and requires no supplementary funding (23,76).

In addition, extension workers paid by World Neighbors cooperate with the Bank to help farmers solve agricultural problems and to refer them for family planning services. These workers resupply condoms and pills. They also arrange for sterilizations, if they are desired, at either the local Provincial Hospital or in Manila and provide transportation (23,76). The program has been in operation for only a few months, not long enough for evaluation.

Allahabad Family Planning Project

The Rural Family Planning Project of the Allahabad Agricultural Institute in Uttar Pradesh Province, India, is another example of an outreach program that links agricultural extension and family planning. It is one of the few in India to make all methods of family planning available. In four years, this project, sponsored by the Family Planning Association of India, has provided contraceptive services to 3,500 couples (27,28).



Fig. 3 Agricultural extension worker and female family planning worker arriving for a village visit in the Allahabad Rural Family Planning Project. (Courtesy of Dr. L. H. David)

The project depends almost exclusively on field teams consisting of a male agricultural extension worker, preferably with a degree from an agricultural college, and a "female auxiliary nurse midwife" (see Fig. 3) (26). The male worker distributes condoms to the men and offers agricultural advice and assistance (25). The female family planning worker distributes oral contraceptives to the women. They recruit and screen acceptors according to criteria established by the Project, initiate the regimen, follow up each acceptor, and provide contraceptive supplies (see Fig. 4) (29).

VILLAGE DISTRIBUTION

Many village distribution systems depend on influential community members—village leaders, teachers, volunteers from the community, members of mothers' clubs or other groups—to stock and distribute contraceptives, to answer questions, and to make referrals to family planning facilities. Usually these people spend only part of their time at these tasks and carry on their usual activities the rest of the time. They may organize educational activities and meetings or they may cooperate with others who do educational work. Whether or not these individuals are paid does not seem to affect the quality of their work; nor does their educational level or training. Personal commitment appears to be the most important factor.

The advantages of using influential and accessible community members to distribute contraceptives are obvious. Because they are selected from and often by their own communities, the distributors feel a personal responsibility to their neighbors. They are readily accessible to provide supplies and to handle problems. A disadvantage of this type of distribution can be lack of anonymity: youthful or unmarried users and perhaps some older married couples may hesitate to request supplies from someone they know personally.

Systems of this type have been used for the distribution of condoms, vaginal contraceptives, and, especially recently, oral contraceptives. They have been effective in Asia and Latin America, and under both government and private sponsorship. Although also successful in urban areas, distribution by community workers is particularly appropriate to rural areas, where inhabitants know one another and where other sources of contraceptives and advice—whether medical or commercial—are inconvenient or impossible to obtain.

Colombia

One of the first programs utilizing distribution by influential or well-known citizens began in the state of Risaralda, Colombia, in 1970. Sponsored by Profamilia, the private Colombian family planning association, and the Coffee Growers Federation, the program depends on a close working relationship between the local distributors and the Profamilia field workers who serve as their immediate supervisors.

Most of the distributors are keepers of small shops, teachers, housewives, or heads of mothers' clubs who are chosen for their leadership abilities by the Profamilia supervisors. After a one- or two-day training course, distributors work out of their own shops or homes, where they display a green flag, symbol of the program (see Fig. 5). From the sale of pills, condoms, and vaginal tablets, the distributors retain approximately half of the amount paid by the buyer—\$0.16 (US) per cycle for pills, for example—and the remainder goes to the program (38). Distributors refer women with side effects to the Profamilia supervisors, who may direct them to a clinic. Distributors do some educational work in the community, but this is primarily the responsibility of the supervisors (55).

The supervisors, who are selected from the area they will serve, receive an intensive three-week training course from Profamilia. In addition to recruiting distributors, the supervisors also make the initial contact with villagers. Each supervisor is responsible for distributors in 10 villages and visits each one every few weeks. While there, the supervisor holds meetings, recruits and educates new acceptors, counsels dropouts, resolves problems of the distributors, collects forms, and resupplies the distributors with contraceptives (36).

According to a careful evaluation done during 1973, the program is producing impressive results. In just two years following its initiation in the two states surveyed, the program had provided contraception to 6,700 women, or 21 percent of the women of fertile age in the villages with distribution centers. Ninety-six percent of these were using orals and the overall continuation rate at 12 months was about 80 percent. The failure rate among pill users of 2.7 per 100 woman-years (Pearl formula) (9) compares favorably with rates in other developing countries (8). The program costs—\$6.28 (US) per new acceptor and \$10.84 (US) per woman-year of protection—were about half of those at the urban Profamilia clinics (9,55). In 1974, the program was operating through 370 distribution posts in six of Colombia's 22 states and had served about 12,400 families



Fig 4. Female family planning worker (seated on cot) discussing contraception with a group of village women in the Allahabad Rural Family Planning Project (Courtesy of Dr L. H. David)

Brazil

A similar program using local suppliers is now operating in Brazil. In 1973, the governor of the state of Rio Grande do Norte, with the help of the Sociedade Civil de Bem-Estar Familiar no Brasil (BEMFAM), the private Brazilian family planning association, initiated a program to instruct community leaders and paramedical personnel about family planning and to organize them to distribute oral contraceptives free of charge in their communities. Before the project began there were only 13 family planning clinics in the state, which has a population of 1.5 million. The program, which began in 10 townships, "municipios," in August 1973, was expanded at the end of 1974 to include all the state's 150 townships. From the beginning the program has had the active cooperation of local leaders, including mayors and health and education officials (99).

Unpaid volunteers chosen from community leaders distribute oral contraceptives free of charge through 205 distribution posts (33). A woman receives one cycle of pills on her first visit and three cycles on each subsequent visit. Those experiencing side effects are referred to the nearest health clinic for evaluation and treatment.

A separate group of volunteers, comprised largely of primary school teachers, handles community education. These volunteers, using material provided by BEMFAM, conduct group meetings or home visits to discuss family planning. Potential acceptors are then referred to the nearest distribution point to receive their contraceptive supplies (55). Distributors and community educators take the same intensive three-day training course designed and run by BEMFAM (99).

Seven regional supervisors administer the program under the direction of a Program Coordinator who is based in Natal, the state capital. The regional supervisors, employed by the Secretariat of Health, are recruited from the regions in which they work. Their duties include supplying pills to distributors, collecting forms which report on acceptors, and helping to solve problems encountered by educators and distributors (33).

Between August 1973 and the end of 1974 about 35,000 women accepted pills from this program (99). It is estimated that, as of early 1975, 31,000, or 8 percent of the state's fertile-age women, were regularly using oral contraceptives.

The political impact of the project has been great, both within the state of Rio Grande do Norte and in the nation as a whole. Opposition from the Catholic Church to the distribution of oral contraceptives without medical prescription was minimized by recruiting 25 doctors for the project. Efforts are currently underway to amend the present legal requirement for a prescription. The project is highly visible and thus is being followed closely by other states and by the federal government. Several other governors have already expressed an interest in establishing similar programs in their states (55).

Initial judgment is that the program in Rio Grande do Norte is reaching rural women who heretofore have not been reached. Cost figures are not yet available. It is noteworthy that the pills are distributed free of charge and are well accepted, contradicting the truism that rural people do not value what they receive free. Also, there have been no reports of serious health problems arising from the pill (55).

Thailand

A similar program, initiated in Thailand in mid-1974 by a private IPPF-supported organization called Community Based Family Planning Services (CBFPS), recruits teachers and community leaders to encourage interest in family planning and to distribute oral contraceptives and condoms. Ultimately, this program will include a subsidized sales scheme for condoms, distribution through the 260,000-member Teachers Council of Thailand, and a village distribution network using community leaders as suppliers of pills and condoms.

To date, seminars and summer sessions have been organized for some 50,000 teachers, and more are being planned. About 3,600 teachers have been trained to distribute orals in villages (3), and 1,500 were actively doing so by December 1974 (54). In the village program, distributors are selected on the advice of local leaders. After one day of training by the district doctor, the distributors are blessed by the monk from the local temple to sanction their services. The distributors recruit new acceptors, supply condoms and resupply pills, keep simple records, reassure and refer people who have problems, and refer those who want IUDs or sterilization (56). By the end of February 1975 teacher and village distributors had recruited more than 28,500 acceptors (54).

Distributors sell contraceptive supplies at low prices, keeping a small portion for themselves and passing on the remainder to the program (113). Program planners hope to finance about 50 percent of its cost from its sales (54).

Mauritius

Unlike most family planning programs at the village level, which provide pills and condoms, a program in Mauritius promotes the rhythm method of periodic abstinence (90). Since 1967 this program, sponsored by Action Familiale and endorsed by the Catholic Church, has been encouraging use of the basal body temperature technique for predicting ovulation.

The program depends upon "autonomous couples," married couples who have had from three to 10 months of training and have demonstrated their motivation to use the basal body temperature method themselves. These couples, together with a small staff of field workers, recruit, teach, and help other couples learn the method. Groups of

"autonomous couples" meet monthly, and every other year they take a refresher course. Although they receive a small honorarium, the dedication of the unpaid volunteers seems to be the major factor in program success. Despite its small budget, the program now has over 10,000 "autonomous" and "supervised couples" on its register (16). Recent statistics provided by Action Familiale to update and correct data published in an earlier Population Report (90) are given in Table 3.

HOUSEHOLD DISTRIBUTION

Distribution of contraceptives and information directly into each household is the ultimate step in achieving contraceptive availability. Pilot projects aimed at testing the effects of household distribution are underway in Taiwan, Egypt, and Korea with support from the US Agency for International Development. In these pilot studies, distributors deliver a free "get acquainted" supply of oral contraceptives and/or condoms, as well as information, to every household willing to receive them. Users then are resupplied from clinics, village supply depots, or commercial outlets.

Household distribution programs can be implemented at relatively low cost because paramedical or low-salary and volunteer nonprofessionals can be utilized and because a permanent facility is not required. At the same time, these programs can reach every household in an area with contraceptives and information which otherwise might not

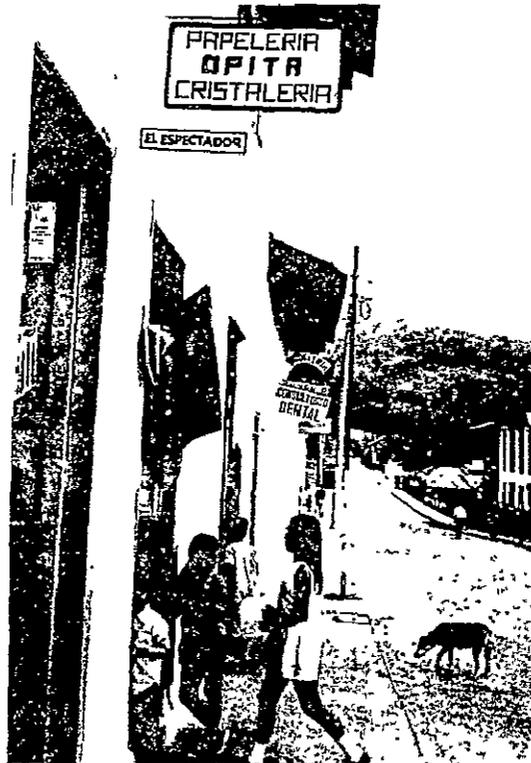


Fig. 5. The green flag hanging in the doorway of this shop in Colombia indicates that contraceptives are sold there. (Courtesy of Dr. Gonzalo Echeverry)

have been sought by couples themselves. Just how much information and education should be provided at the time supplies are first delivered is not yet known. Utilization is measured by follow-up surveys and by watching trends in subsequent purchases of subsidized contraceptives from village resupply points.

Door-to-door contraceptive distribution has proved successful in countries like Japan and China. Evidence from the USAID-supported pilot studies suggests that this approach can be a valuable addition to clinic based systems.

Taiwan

Household distribution of oral contraceptives and condoms is currently being tested in Taiwan in a cooperative venture of the government and Johns Hopkins University, with funding from USAID.

In 12 townships throughout Taiwan, family planning distributors visited in their homes women who were three months postpartum and gave each six cycles of pills and six dozen condoms. Of 3,355 women visited between April 20 and July 31, 1974, 74 percent had never used contraception previously. Ninety percent accepted the contraceptive supplies (81). During the initial visit, distributors leave resupply coupons and self-addressed postcards. The resupply coupons can either be mailed or taken in person to resupply depots to be exchanged for additional contraceptives (117). Women can mail the postcards to notify the program if they encounter problems related to contraceptive use (see Fig. 6).

In three months over 27,000 cycles of pills and 21,000 dozen condoms were distributed to households. Fifty-four percent of the 1,753 women who were revisited said they had used some of the pills or condoms and an additional 10 percent said they were using other methods. Of 546 who accepted condoms, 92 percent said they were still using them after three months. Of the 486 women who accepted pills, 65 percent said they were still using them after three months (82).

In 1975, the household distribution program was expanded in six of the 12 townships to include not only postpartum women but all married women aged 15-49—regardless of contraceptive or pregnancy status—a total of more than 20,000 women. These women were located through the township registers. By the end of April, 6,852 women had been visited and 61 percent had received pills or condoms. About 21 percent did not receive contraceptives either because they were currently protected by other methods or because they chose to obtain pills and condoms from commercial sources. An additional 19 percent did not accept contraception for a variety of other reasons, such as wanting more children, or dislike of

methods offered (83,84). A more comprehensive evaluation, comparing the study township with 12 similar control townships, will be conducted in 1976.

Egypt

Another USAID funded pilot project for household distribution is now underway in a rural area of Egypt north of Cairo. Conducted by the Social Research Center of the American University in Cairo (AUC), the project employs literate women to canvass and distribute contraceptives in their own residential areas. After about two weeks of intensive training covering family planning, contraceptive methods, canvassing techniques, and practice in the field, the canvassers take on a dual responsibility: gathering basic fertility data and distributing contraceptives (110).

When the project began in November 1974, only orals were distributed, and they were not given to pregnant or lactating women. Now orals and condoms are being offered to all Users go to the clinic for resupply. This household distribution project appears to be both culturally acceptable and logistically feasible in its present locale of about 14,000 people. The following table shows the increase in oral contraceptive use during the first four months of the project.

Prevalence of Oral Contraceptive (OC) Use Following Household Distribution, Egypt, Nov 1974 to Mar 1975

Households visited	2003
Women aged 15-49 therein	1820
Actual and potential* OC users in November	1146
Actual users of OCs at November canvass	233 (20.3%)
Actual and potential* OC users in March	1041
Actual users of OCs at March canvass	309 (29.7%)
Increase in number using OCs, November to March	46%

*Potential OC users were defined as married women, 15-49 years of age, not pregnant, not less than 3 months postpartum, not sterilized, not using an IUD, and with a husband present.

It is anticipated that the proportion of women using oral contraceptives in these Egyptian households will increase further before stabilizing at a high level.

Korea

In Korea the Population Institute of the East-West Center, University of Hawaii, with funding from USAID, is administering a project to evaluate several contraceptive distribution systems. In three rural communities, each of approximately 6,500 people, different systems have been set up. In the first community, locally recruited female canvassers visit each eligible woman and offer a three-month supply of free pills and/or condoms. In the second com-

Table 3—Action Familiale Service Statistics, Mauritius, 1972-1974

Year	Number of couples being supervised	Number of dropouts	Percent dropping out	Number of dropouts with unwanted pregnancy	Percent of dropouts with unwanted pregnancy
1972	2,944	1,219	41	358	29
1973	2,892	1,054	36	296	28
1974	3,855	1,003	26	250	25

SOURCE: Bruneau (16, 17)

munity, each eligible woman is invited to a meeting during which family planning is discussed, questions are answered, and a three-month supply of pills and/or condoms is offered. Women who do not attend the meetings are later visited at their homes. In the third community, the local family planning worker chooses one woman out of every 10 eligible women to be a contraceptive distributor. Each distributor is given the names of nine other women and is asked to provide each of them with a three-month supply of contraceptives. In each village someone is specifically designated as a resupplier for pills and condoms so that users need never leave their village to get contraceptives (2: 110)

The systems of distribution in the three communities have several common features. In each community all married women aged 15-44 who are not pregnant, breast-feeding, or three months or less postpartum are identified and offered family planning supplies. Women who desire IUDs are referred to the nearest clinic and their transportation costs are paid. In the rare instance that a woman experiences side effects from orals, she is referred to the clinic. Because the project has been underway only since February 1975, sufficient data for evaluation are not yet available.

Peoples Republic of China

A national program which appears to have had some success with household distribution of contraceptives is that of the Peoples Republic of China. China was one of the first developing countries to rely on paramedical personnel to perform many of the tasks traditionally carried out by doctors, including distribution of contraceptives. The contraceptives delivery system reportedly

free the government to employ its regular fully trained medical doctors in tasks that genuinely require professional competence, such as inserting IUDs, performing induced abortion, tubal ligation and vasectomy, and treating side-effects of complications arising from contraceptive use (19)

In urban areas, oral and other contraceptives are supplied through neighborhood health stations. Housewives who volunteer their services as distributors come to these health stations for supplies, which they then distribute to the women in their own communities. In rural areas "barefoot doctors" deliver contraceptives free of charge to couples in their homes, rather than waiting for couples to take the initiative to come to clinics for contraception. In both rural and urban areas, women who have questions or problems and those who want IUDs, sterilizations or abortions are referred to appropriate personnel who are medically trained (19).

PROGRAM ISSUES

As family planning programs in developing countries begin their second decade of operation, several conclusions can be drawn

- Translating population policies into effective family planning programs that reach most of the fertile couples in a developing country is a difficult task. It can be accomplished rapidly only if innovations such as village and household distribution of contraceptives are implemented.

- Providing oral contraceptives without the direct supervision of a physician is appropriate, efficient, and acceptable in countries where physicians are scarce and where most of the population traditionally relies on midwives and paramedical personnel for health services
- Distribution of nonclinical contraceptives to a population usually involves three phases: availability from clinics, as in many countries during the 1960s; availability in every village, as is now being achieved in a number of countries; and availability in every house-

CONTRACEPTIVE SUPPLIES REQUEST

Case No. Name _____

I have been using the contraceptives which you offered on (date) _____ and the result is very good. Please resupply me the following signed item.

 Pill Seal or signature

 Condom Seal or signature

1. This form will be valid after (date) _____
2. Case may bring this form to health station or depot or mail this postage-paid form to health station to obtain resupply
3. This form cannot be endorsed to another person

Resupply given by _____
Date _____

REQUEST FOR CONSULTATION

Case No. Name _____

I have been using the contraceptive supplies which you offered on (date) _____ but I have the following problems. Please come to see me or write me further information.

Bad reaction

Need further information

Remarks on consultation _____

Consulter _____
Date _____

Fig 6 Translations of postage-paid resupply (top) and consultation (bottom) postcards given to clients by distributors in the Taiwan household distribution project

hold, as is now being tested in a number of pilot projects.

- Achieving village and household availability requires innovative and flexible approaches to supervision, distribution, supply system, information, and evaluation
- Winning acceptance and utilization of new distribution systems by the populace appears less difficult than overcoming opposition from conservative medical practitioners, competing commercial contraceptive distributors, or regular family planning personnel who may see the new projects as a threat to their jobs or incomes. Close links with influential leaders in the medical profession and in government should be developed to reduce this resistance
- Although many of the innovative new distribution programs have not been in operation long enough for definitive evaluation, most show sufficient promise to justify additional support and replication where conditions are appropriate (see Table 4)

Family planning program directors should consider the contributions which each of the following innovations in distribution could make toward achieving general availability and utilization of contraceptives

- subsidized sales by retail outlets, existing institutions, village supply depots, or door-to-door household distributors
- distribution of a free "get acquainted" supply of oral contraceptives, condoms, or spermicides, along with

information, to every household, especially in the most impoverished areas

- use of volunteer and part-time distributors—teachers, agricultural extension workers, students, housewives, and others—to provide supplies and answer questions

More important than the particular program procedures, however, are those attributes successful programs have in common

- dedicated and competent individuals to direct and supervise local programs
- distributors recruited from within the community
- a short and effective training session in family planning and contraception for program personnel
- delivery of contraceptives to the prospective user in her or his own village or household rather than dependence upon the individual to visit health centers or clinics
- establishment of a medical referral system for those who desire clinical or surgical procedures for contraception or abortion and for those who encounter problems in using contraceptives

In the complex of factors which determine fertility and fertility control behavior, the availability of effective means of fertility control is at present usually the dominant factor (78). Once contraceptives are generally available in the village and household, then the role and strength of other factors, such as education, income, and employment, can

Table 4—Evaluation Data Available for Selected Contraceptive Distribution Projects 1971-1975

Country (Program)	Year	Ref. No.	Couple Years of Protection (CYP) (thousands)	Cost per CYP (\$US)	Cost per Acceptor (\$US)	Women 15-44 Reached (%)	Continuation Rates at 12 months (%)
SUBSIDIZED SALES							
India (Nirodh)	1974	109	1614.4*			1.3*	
Ghana (Foams) (Condoms)	1972	41	40.4 7.3*			2.4*	
Sri Lanka (Preethi)	1974-1975	44	56.0	4.86	3.40	2.0	
INSTITUTIONAL DISTRIBUTION							
Philippines (INC pilot study)	Oct 1974-Mar. 1975	38,39			2.50		
India (Allahabad)	1971-1974	28				9.8*	82 (condoms) 40 (orals)
VILLAGE DISTRIBUTION							
Brazil (Rio Grande do Norte)	Aug. 1973-Dec 1974	55,99	14.1*			9.5	66
Colombia (rural Profamilia)	Mid-1971-1973	9	3.1*	10.84	6.28	21.2	80 (orals)
Mauritius (Action Familiale)	1973	16		5.00 ^a	11.60 ^a	5.0*	
HOUSEHOLD DISTRIBUTION							
Taiwan (all women-pilot study)	Jan-Apr 1975	83,84				20.8*	
Egypt (rural pilot study)	Oct 1973-Feb 1974	40,110				53.0	

*Calculated from data in reference listed

^a1971 data

NOTE: Blank spaces in this table indicate there are no program data available for that column

be assessed While in the long run many population policies must be adjusted to achieve population and development goals, in the short run the simplest, surest, and least expensive way to achieve rapid reduction in fertility is to increase greatly the availability of the most effective means of fertility control.

The following organizations have been involved in the establishment and supervision of programs for the distribution of contraceptives to villages and households.

Family Planning International Assistance
810 Seventh Avenue
New York, N Y 10019
USA

International Planned Parenthood Federation
18-20 Lower Regent Street
London SW1Y 4PW
United Kingdom

Population Services International
Suite 1520
120 East 56th Street
New York, N.Y. 10022
USA

United States Agency for
International Development
Office of Population
Washington, D.C. 20523
USA

World Neighbors
5116 North Portland
Oklahoma City, Oklahoma 73112
USA

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