

CENTER FOR POPULATION AND FAMILY HEALTH
COLUMBIA UNIVERSITY

ANNUAL REPORT

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JULY 1, 1981 - JUNE 30, 1982

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I. SUMMARY

On July 1, 1979, the Center for Population and Family Health of Columbia University and the Agency for International Development, International Development Cooperation Agency; entered into a Cooperative Agreement (AID/DSPE-CA-0043) to support a broad range of activities aimed at the improvement of family planning and primary health care service delivery in developing countries. The Agreement provides funding over the five year period July 1, 1979 - June 30, 1984 at a level of \$11,895,000. This Annual Report provides details of activities and accomplishments during the third year of the Agreement, July 1, 1981 - June 30, 1982.

Three primary objectives are the mandate of the Cooperative Agreement, each with a number of associated activities. These objectives and activities are presented below, followed by a summary of related accomplishments during this reporting period.

COOPERATIVE AGREEMENT OBJECTIVES

Objective 1.

"To provide technical assistance to developing countries to initiate public and private sector family planning programs, or to solve operational problems in existing programs, with special focus upon nonclinical, community-based service delivery, to also include technical resources for programs that involve maternal/child health and/or basic public health service.

a. To respond to needs for short-term technical assistance to developing country (LDC) public or private sector program managers for the improvement of components of family planning delivery systems, and/or for the design of new systems...

b. To provide resident technical advisors to national programs in Haiti, Thailand, Peru, Guatemala and approximately three additional countries, with emphasis on the Sub-Saharan Africa region (both Anglo and Francophone.)

c. Both resident and short-term advisors may assist AID/DS and local USAID Missions in identifying and designing promising family planning or family planning/basic health initiatives in developing countries...

d. Where possible, the above assistance and research will be coordinated with existing or potential clinical service infrastructure and will be coordinated with other international agencies whose focus is upon clinical service (e.g., IPAVS and JHPIEGO.)"

During this reporting period, CPFH continued and expanded its efforts in the provision of technical assistance to family planning and basic public health programs in a variety of developing country settings. New York-based staff travelled extensively in response to the needs of ongoing projects, and in response to requests from local USAID Missions and host country counterparts for assistance in designing or modifying service programs. Resident advisors in Brazil, Haiti, Sudan and Thailand continued to provide valuable services to programs in those countries, while new resident advisors were placed in both Nigeria and Tanzania. Also during this period, several promising opportunities for assisting in the development of new programs were identified. In cooperation with local USAID Missions, Center staff have made contact with institutions in Bolivia, Burundi, Ecuador, Senegal, Togo, and Zimbabwe concerning the provision of short- and long-term assistance to innovative programs being contemplated in those countries. CPFH

significantly increased the extent of its cooperation with other international agencies during this period, as evidenced by new joint efforts with the Pathfinder Fund, IFRP and IPAVS.

Objective 2.

"To provide subagreement funding support to implement operations research towards testing delivery system components and otherwise overcoming impediments to more efficient and cost-effective service delivery, with special focus upon urban slum and poor rural areas of Latin America and Sub-Saharan Africa, but not to exclude assistance and research in other regions.

a. To assume responsibility for sub-agreement support and short-term technical assistance as necessary to programs initiated previously under Contract AID/pha-C-1107.

b. To develop approximately five (5) new subagreement activities for directly supporting implementation of operations research on family planning or family planning/basic health service delivery..."

The development, implementation, monitoring and evaluation of operational research projects funded through the subagreement mechanism continued to receive highest priority during 1981-1982. Ongoing project activities in Brazil, Nigeria and Sri Lanka showed remarkable progress, and have had significant effects upon national programs in those countries. In Brazil, for example, findings from operational research studies in Piaul have been applied throughout BEMFAM's CBD programs leading to increased contraceptive acceptance and decreased program costs. In Nigeria, the successful delivery of family health care services in the rural project area has led to a request from the Oyo State Health Council for an expansion of these activities to additional

state health zones.

Two additional subagreement projects were implemented during this reporting period. In Mexico, a broad program of operational research in the state of Chihuahua was developed and implemented in November, 1981. Financial and political problems within the Mexican Ministry of Health forced the premature termination of this promising project. In Tanzania, a subagreement designed to expand and add an operational research component to the Masai Health Services Project was initiated in April, 1982. This promises to be one of the Center's more exciting and innovative undertakings, in that it involves the delivery of family health services to an underserved, very traditional population.

It is anticipated that subagreement project development activities begun during 1981-1982 will lead to the approval and implementation of as many as four additional subagreements by the end of 1982.

In addition, CPFH has provided major support to family health/operational research projects funded directly by AID/Washington or local USAID Missions, through the provision of resident advisers and technical assistance from other Center staff. These efforts have proven particularly effective in the Sudan and Haiti, where the results of operational research studies are being used in shaping national health care policies.

Objective 3.

"To improve developing country capabilities for evaluation and internal management of program operations research, and to improve the availability of information about international experience in family planning operations research.

a. To assume responsibility for technical literature library indexing and information retrieval in the field of family planning and basic health program evaluation and operations research, to be integrated with the multicenter computerized population information system, POPINFORM.

b. To provide occasional short-term and long-term training, at the recipient's headquarters, for developing country technicians in the fields of program design, management, and evaluation, especially as such training complements other assistance and activities of the recipient in specific countries.

c. To assist AID/DS and AID/Africa Bureau in the development of an African Regional Conference on community-based family planning programs, probably to be held during the third year of the Agreement.

d. To produce and disseminate (publish or otherwise distribute) results of technical analyses of operations research performed under this Agreement, and to convene seminars in LDCs which will bring to the attention of the political and professional leadership the benefits of fertility regulation and family planning/basic health delivery systems."

During this reporting period, the CPFH continued to be a leader in the improvement of developing country institutions' capabilities to effectively manage and evaluate their own programs of family health service delivery and operations research. While the entire CPFH International program contributes to the enhancement of indigenous research and service delivery capabilities, several activities are designed specifically to meet this program objective. In Thailand, for example, the resident advisor continued to provide the Ministry of Public Health with technical resources not otherwise

available, and worked with Thai counterparts in improving the Ministry's data collection and analysis capabilities.

A major activity in addressing the objective of improving the availability of information was the CPFH library's compilation and dissemination of literature related to family planning and health care programs, as well as technical literature related to operations research. The library, both independently and in conjunction with other library/information programs, provides a world-wide audience with ready access to the most recent literature in the multidisciplinary areas of population and family health.

CPFH professional staff, in collaboration with developing country counterparts, continue to document and disseminate in a variety of media the experiences from operational research projects. This documentation, ranging from reports and working papers intended for limited distribution, to journal article publications and conference presentations, significantly increases available knowledge in the field.

CPFH also contributes to developing country capabilities through various training activities. Host-country project personnel often undergo formal training as part of their participation in project development and implementation activities. On occasion some project staff members will also receive training at other project sites or in New York. For example, during this reporting period, 14 people from 5 projects supported with Cooperative Agreement funds received training at

the annual CPFH training program for developing country family planning and health professionals (principal funding from the Rockefeller Foundation).

II. INTRODUCTION

The implicit goal of the Cooperative Agreement, and the overriding concern of the Center for Population and Family Health, is to assist in obtaining the highest possible quality of health and reproductive care for the poorest women and families of the developing world. During the past year, we have instituted a number of organizational changes, and embarked on new endeavors and programmatic developments which enhance our progress toward this goal.

Ongoing efforts to develop additional activities in Sub-Saharan Africa intensified during this reporting period. As a result, one additional project was undertaken (Tanzania), two others are in the final planning stages (Burundi and Togo), and we are responding to requests for technical assistance from two additional countries (Senegal and Zimbabwe). Each of these activities represents a special challenge to our ability to assist in providing services appropriately and effectively to unique populations. Similarly, we have the opportunity to work with new innovative programs in Latin America (Bolivia and Ecuador) which will serve populations with special needs.

This year has seen the further evolution of several projects which not only continued to provide quality health services to those in need, but also matured as "laboratories" for evaluating various aspects of health care delivery. These projects (including those in Brazil, Haiti, Nigeria and Sudan) have begun

to have real impact beyond their service areas, as in-country policy makers draw upon operational research findings in shaping broader programs. Our staff also have gained valuable experience which is of use in designing and managing new programs.

The Center's ability to support existing and new activities has been strengthened by the addition of new professional staff members. Two French-speaking staff with broad experience in health programs were recruited to assume major responsibility for projects in Francophone Africa. New resident advisors with strong skills relevant to projects in Nigeria and Tanzania assumed posts in those African countries. These additions to our staff fortify an already diverse, talented team of health care and research professionals.

In New York, much attention was given during this period to improving administrative procedures, financial systems, and technical services. These improvements include: 1) The development of a CPFH Procedures Manual; 2) A more formal system for the preparation and review of project proposals; 3) Procedures to ensure timely financial and substantive reporting, both from projects to CPFH and from CPFH to AID; 4) The development of tools and procedures which facilitate project work planning and monitoring; 5) Mechanisms which improve communication with, and support to, overseas staff; 6) More effective budgeting and control of expenditures; and 7) More direct access to a wider range of data analysis resources. Two staff members with strong administrative backgrounds, and a computer research specialist, joined the Center Staff. Their

efforts have contributed to better administrative support for the program, sound fiscal management and enhanced data analysis capabilities.

The increasing scarcity of resources for the support of population and family health programs has led CPFH to seek more cost-efficient allocation of funds and other means of conserving available resources under the Cooperative Agreement. A major drain on funds available for overseas programs was lessened during this year through the negotiation of a reduction in Columbia University indirect costs chargeable to the Agreement. The costs of specific projects has been reduced through institutional collaboration agreements with other agencies. The Pathfinder Fund, for example, has joined CPFH in providing assistance to projects in Nigeria and Brazil, significantly reducing the cost of these projects to both organizations. These developments, together with careful husbanding of funds in all aspects of the Center's program, should allow for the provision of adequate financial support to overseas projects through fiscal year 1983. However, the anticipated need for continued support for these activities in fiscal year 1984 and beyond is a matter to which CPFH and AID staff must give considerable attention in the coming months.

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III. FINANCIAL STATEMENT

	Funds Awarded	Expenditures	Estimated Expenditures
	7/1/79-6/30/83	7/1/79-6/30/82	7/1/82-6/30/83
Salaries	\$2,521,902	\$1,772,627	\$ 748,488
Consultants	35,000	54,353	20,000
Fringe Benefits	619,464	426,348	181,952
Travel/Transportation Allowance	663,751	406,198	190,000
	386,642	315,928	140,000
Other Direct Costs	414,601	278,043	165,000
Equipment/Supplies	275,118	104,668	95,000
Subagreements	2,822,844	1,742,732	1,097,985
	<u> </u>	<u> </u>	<u> </u>
TOTAL DIRECT COSTS	\$7,739,322	\$5,100,897	\$2,638,425

IV. ACTIVITIES 7/1/81 - 6/30/82

A. SUBAGREEMENTS

1. BEMFAM Community-Based Project, Piaul, Brazil

Since 1979, CPFH and BEMFAM have been involved in a collaborative operations research project in Piaul State, Brazil. Taking the basic BEMFAM CBD model as the point of departure, CPFH has provided assistance for testing delivery system components in a search for a more effective and efficient service delivery model. Major interventions have included: (1) adding additional methods (condom, spermicides, IUD and sterilization) to the original pill only program; (2) determining the relative cost-effectiveness of the three traditional locations for BEMFAM posts: health facilities, private homes, and community buildings; (3) attempting to find the most cost-effective methods of expanding rural program coverage; (4) investigating ways to improve BEMFAM's administrative system, including supervision, service statistics, medical back-up, and inventory; (5) testing new program components including a post-partum project and involvement of traditional midwives.

The major operational problems faced by the BEMFAM CBD program have traditionally been relatively low levels of direct program impact (at the state level, projects stabilized within 2-3 years at 10%-12% contraceptive prevalence), and relatively high costs. The Center's operations research activities are contributing to the solution of both problems. For example, the addition of new methods (condoms and spermicides) to the Piaul

program raised acceptance from less than 20,000 clients in 1980 to over 30,000 in 1981. Table 1 demonstrates this improvement in program performance attributable to the addition of barrier methods. In all states where the new methods were added they helped reverse a downward trend in program acceptance. In PiauI, the new methods also brought the program to a previously unserved group -- young, unmarried males and couples. In 1982, the program will add sterilization and IUDs to the methods available and is expected to provide many more services to older, high parity women than in the past.

TABLE 1
AGE DISTRIBUTION OF PIAUI ACCEPTORS
1979 - 1981 (all methods)

	1979	1980	1981
20	10%	14%	17%
20-24	28%	32%	33%
25-29	27%	24%	23%
30-34	17%	15%	14%
35-39	12%	10%	8%
40-44	5%	4%	4%
44 +	1%	1%	1%
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	N = 2204	N = 1887	N = 2882

Table 2 presents two estimates of program prevalence for each year between 1979-1981. Column (a) rates are based on total MWRA. Column (b) rates are based on "eligible women" - MWRA who are not surgically sterile, sub-fecund, or menopausal. This rate

provides a truer picture of the CBD program's penetration of the market for contraception than does the rate based on total MWRA, which is presented for comparative purposes. The number of eligibles during 1979-1981 was 193,000, 198,000 and 203,000, respectively. As can be seen, program prevalence has virtually doubled in the period 1979 to 1981.

TABLE 2
PIAUI: ESTIMATED PROGRAM PREVALENCE RATES
DECEMBER 1979 - DECEMBER 1981

YEAR	(a) MWRA	(b) ELIGIBLES
1979	6.9%	8.7%
1980	9.6%	12.0%
1981	12.6%-13.8%	15.8%-17.2%

Program effectiveness has also been improved by experiments designed to increase services for the rural population. This has been accomplished by opening new posts in 30 rural villages and establishing "alternative" posts in urban places, such as markets, that are regularly visited by rural women. In 1982, a post-partum/post-abortion project in Piauí regional hospitals will also be initiated. If feasible, a project utilizing traditional midwives (parteiras) for contraceptive distribution will be introduced.

Cost analysis of various types of service posts has provided BEMFAM with a useful planning tool. More importantly, a supervision experiment demonstrated that the frequency of supervision visits to posts can be reduced from monthly to

quarterly without harming program performance. The quarterly system is now being used in all BEMFAM CBD programs and substantial cost reductions appear likely. The new system also results in decreased workload for supervisors. In 1982, operations research will attempt to capitalize on this additional time by demonstrating ways in which supervisor productivity can be increased, including detection and retraining of substandard distributors, and organization of a post-partum and post-abortion family planning motivation program. A study was also conducted of the cost per patient of maintaining medical supervision of the CBD program in Piaul. The cost of treating side effects and contra-indications was demonstrated to be extremely high (almost \$59 per patient). This finding contributed to the scaling down of costs of medical supervision in Piaul. BEMFAM is also working on simplified, less costly service statistics and inventory systems. These systems will be evaluated in Piaul.

Operations research in Piaul has contributed to both increased contraceptive acceptance and decreased costs in all BEMFAM CBD programs. The value of this activity has been recognized by BEMFAM, which sees Piaul as a laboratory for program change. This view is shared by other donor agencies such as the Pathfinder Fund which has assumed service delivery costs in Piaul from CPFH and is interested in applying operations research techniques to its other Brazilian projects. CPFH is already providing consulting assistance to Pathfinder in this area. CPFH is also working towards the institutionalization of operations research at BEMFAM by financially supporting and

training local research staff in both Piaul and Rio de Janeiro.

A variety of research methodologies have been employed in Piaul, ranging from contraceptive prevalence surveys to programmatic experiments. As a result, data have been collected that shed light on program dynamics. The project has already yielded four papers published or presented, and four more are in progress. All of these works are intended to increase the availability of information about experience in family planning operations research.

Budget Summary
 Subcontract #1 (Brazil)
 7/1/79 - 6/30/82

<u>Category</u>	<u>Budget</u>	<u>Expenditures</u>
Personnel	\$616,798	\$767,970*
Administration	\$518,016	\$311,181
Travel/Transportation	\$190,200	\$174,686
Supplies	\$16,000	\$20,593*
Indirect Costs	<u>\$201,152</u>	<u>\$191,165</u>
TOTAL	\$1,542,166	\$1,465,595

*Budget deviation approved by CPFH.

2. Alternatives for Reinforcing Rural Community-Based Maternal/Child Health and Family Planning Services, Chihuahua, Mexico.

The Chihuahua Project was a joint effort of the Mexican National Family Planning Coordination, the General Directorate of Maternal/Child Health and Family Planning of the Ministry of Health, and the Coordinated Public Health Services of the State of Chihuahua. CPFH was involved in the development of the project and provided both financial support and technical assistance.

The project sought to reinforce the current family planning and maternal child health activities in the rural areas of Mexico's largest state and, by so doing, develop models for application throughout the country. The project was designed to implement and evaluate alternative approaches to training and

supervision, and to modify and assess changes in the logistics and service statistics systems. In addition, the project was to assist the Ministry in evaluating the introduction of new health services, including oral rehydration therapy for diarrhea.

The project began November 1, 1981 but was prematurely terminated December 31 of the same year. Because of financial constraints and internal political problems, the Ministry of Health cancelled the Chihuahua Project along with a number of other projects. Within the project, the data collection for the baseline survey was completed. There were 1,200 completed interviews of women of reproductive age from a probabilistic sample of rural areas. In addition, the survey team completed 166 interviews with community health agents and 26 interviews with supervisory personnel. AID/Washington and CPFH have agreed that CPFH will process these data in order to provide the potentially useful results to the Coordinated Public Health Services of Chihuahua. The estimated cost for coding, key entry, verification, and cleaning of the data is \$6,200.

The proportionate project cost pertaining to CPFH for the months of November and December, 1981 was about 950,000 Mexican pesos, equivalent to about US\$19,800 at the current exchange rate. CPFH is arranging to transmit these funds to Mexico.

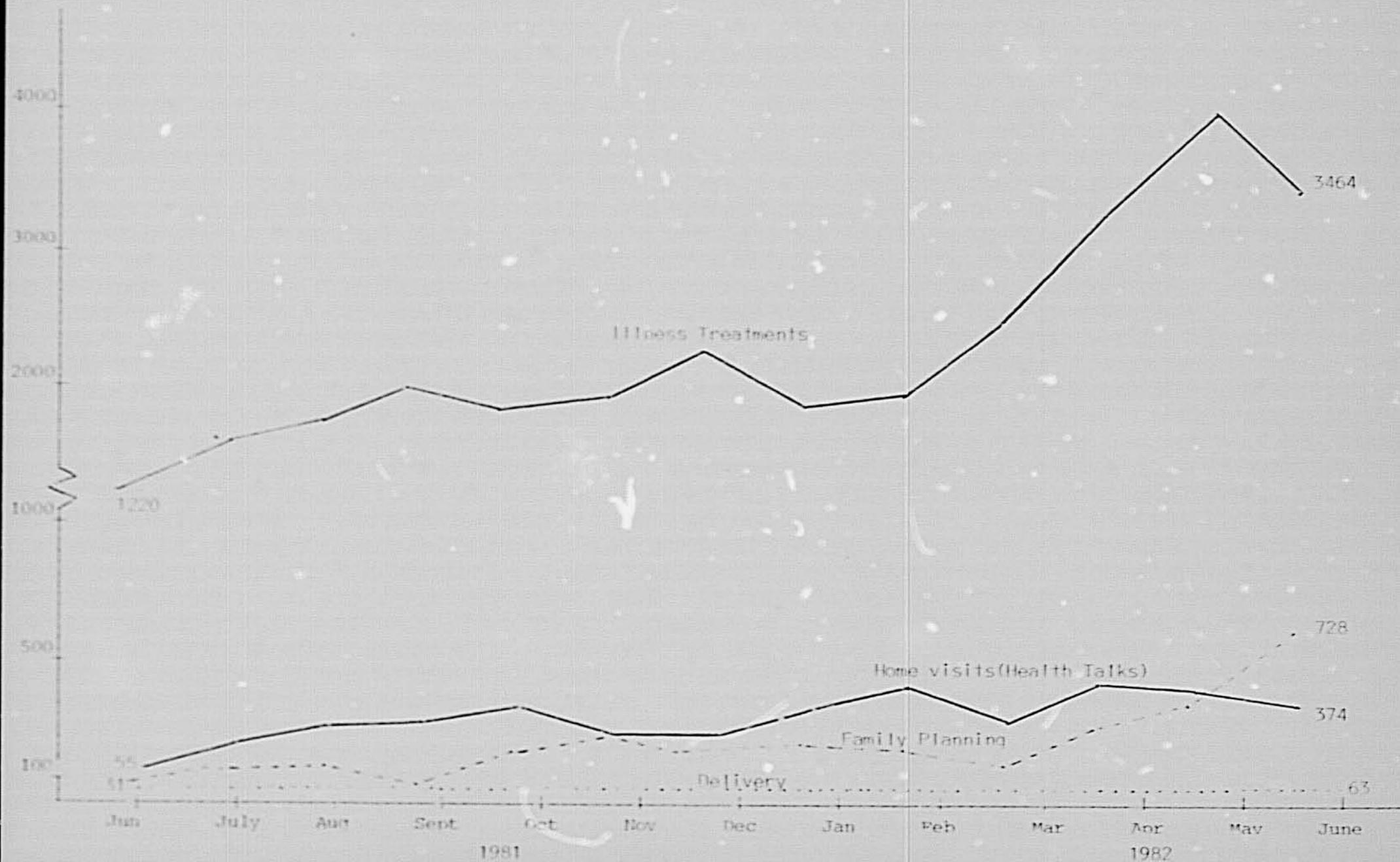
3. Community-Based Distribution Project, Ibadan, Nigeria

The Community-based Distribution Project in Ibadan, Nigeria is coordinated through the University College Hospital (UCH), Department of Obstetrics and Gynaecology, under the direction of Professor O.A. Ladipo. It was begun in June of 1980, with

funding continuing until September of 1982. Based in the Akinyele North Local Government Area, the project utilizes mostly illiterate male and female volunteers to deliver low-cost family health care and family planning services to rural communities. The program has trained 165 village volunteers in the areas surrounding eight maternities or health centers which serve a population of approximately 85,000 persons. Table 3 illustrates the increase in delivery of services by the volunteers during this reporting period. Of particular interest is the increase in family planning service delivery. Project personnel, who are well trained and enthusiastic about family planning, faced a difficult task in introducing these services to an area where contraception was virtually unknown. As the table indicates, their efforts are now beginning to show significant effects.

Table 3

Monthly Performance of CBD Health Workers
Akinvele North L.G.A.



Supervisory and training staff come from both the University College Hospital and the local government areas. The highest level of supervisors, under the direction of Mrs. G.E. Delano, are senior nursing sisters from the Family Planning Unit of the UCH. They, in turn, supervise the local government trained midwives. Recently, the maternity auxiliaries (wardmaids) stationed in the eight maternity centers in the area were identified as valuable intermediate personnel and have been brought in to supervise the volunteers.

The voluntary workers themselves were chosen by local village leaders and were trained in basic health care (including oral rehydration therapy, maternal/child care, and family planning). Training activities were conducted over a six-month period during the first year of the project. Since that time, two refresher training phases have been carried out at six-month intervals. These have reinforced the concepts learned during the original course in oral rehydration, maternal/child care, and family planning.

A pre-program survey was carried out to provide baseline data. Ongoing evaluation of day-to-day activities is also performed. A pictorial service record form was devised on which the CBD workers mark each treatment for a minor illness, birth attended, family planning acceptance, and home visit. These sheets are turned in monthly for recording and analysis at UCH. In conjunction with this, the amount of drugs distributed is recorded at the maternity centers. This functions as a running

check on supplies distributed which can be compared to treatments recorded.

In November of 1981, Ms. Priscilla Randall was approved as the Center's Resident Advisor to the UCH project. Earlier technical assistance to the project had consisted of short visits with specific objectives. Being based in Ibadan, Ms. Randall is able to provide assistance as needed and on an ongoing basis. Her primary objectives are to assist the UCH staff in training, supervision, evaluation, and documentation of project outcomes.

During the year, all local government area workers, including those involved in the project, went on strike for approximately three months. This strike had both a direct and indirect impact on the project. Because project volunteers could be neither supplied nor supervised during the strike, their effectiveness was impaired. However, activities quickly picked up again once the strike was over.

Of particular interest in the past year was the expression of interest by the State Health Council in expanding the current project to the other four health zones of Oyo State. The visit of Dr. Lauro in December facilitated the introductory meetings with the Director and Chairman of the State Health Council. Feasibility of such an expansion was discussed at this time. Additional meetings were held in February and March. UCH project staff members, Oyo State Health Council officials, Dr. Weiss from Columbia, and Dr. Marasha from the Pathfinder Fund attended. Aspects of the extension proposal, particularly with regard to budget items, personnel staffing and logistics were discussed.

The expanded program, which is in the final stages of the planning process, is being developed as a collaborative effort of the Oyo State Health Council, The Pathfinder Fund, and Center for Population and Family Health. During the project, the Oyo State Health Council will gradually increase its financial responsibility for the activities, moving the project towards self-sufficiency. Within the expanded project, operations research will be conducted on volunteer selection and incentive policy.

Both to facilitate gathering information for the expansion proposal, and to pinpoint problems in the current program, an in-depth survey of service providers and users was designed and carried out in March. Village health workers and their clients were interviewed concerning service provision and knowledge of project activities. The mini-survey approach used to collect this data was most useful in that it provided much needed information in a short period of time. In addition, because the UCH supervisors were intimately involved in collecting the data, there was great impetus to translate the findings into programmatic improvements. For example, the study led to a redesigning of the pictorial data collection instrument, insuring more reliable and accurate service statistics.

Information from this study was also incorporated into the training/retraining of project-related personnel. In a conscious effort by the UCH staff to upgrade family planning services, each cadre of workers was given in-service training at the UCH family planning unit. In addition, the wardmaids were identified as potential resources for the project. Consequently, all 8

wardmaids in the project area were given a two-week training course in the concepts of the community-based approach and the practicalities of this project, and a week's training at the family planning unit of the UCH. Because of the enthusiasm displayed upon completion of the training, the wardmaids will serve as motivators for family planning.

An effort has been made to delegate supervision to the wardmaids and government midwives. They have been given increased responsibility in the management of the monthly meetings, regularly visit the project workers, and will handle all drug re-supply. This last change is part of a larger reorganization of the supply system, in which the main supply will be moved out to Moniya (the LGA headquarters maternity center), and emphasis will now be on bulk transfer of supplies to depots throughout the project area, instead of the resupply of individuals.

In June, 1982, seven health personnel from the UCH staff and the Ministry of Health, Oyo State, attended the CPFH Training Course. Lessons learned during this course will be applied to future work within the project expansion.

Budget Summary
 Subcontract #2 (Nigeria)
 7/1/81 - 6/30/82

<u>Category</u>	<u>Budget</u>	<u>Expenditures</u>
Project Supplies	\$26,000	\$13,704
Salaries and Per Diem	\$56,000	\$47,904
Office Supplies	\$2,500	\$4,200*
Conferences	\$10,000	\$6,892
Travel	\$18,000	\$16,211
Indirect Costs	\$2,000	\$2,000
TOTAL	\$114,500	\$90,911

*Budget deviation approved by CPFH.

4. **Operational Research in Social Marketing of Contraceptives, Colombo, Sri Lanka.**

The Center is assisting the Family Planning Association of Sri Lanka (FPASL) in the third year of a project designed to improve the commercial marketing of condoms and pills. This project has provided support to a commercial sales research project of the FPASL during a period when market conditions were changing rapidly and long-term funding for the program was not assured. It has permitted the FPA to explore alternative sales strategies, to improve both distribution and cost recovery, and to carry out studies of contraceptive use. This is significant in the national program because the FPA plays a major role in the provision of services, IEC, research and training in Sri Lanka. From 1974 to 1981 the FPA provided services to 7% of all new family planning clients in clinics (including 29% of the

vasectomy clients and 47% of clients for injectable contraceptives); and is currently distributing, through its commercial sales program, approximately 90% of the condoms and 40% of the oral contraceptives used nationally. In the original project design, Sri Lanka was divided into 10 districts. In all 10 districts, FPA Marketing Officers and other staff carry out promotional and educational activities, and village-level projects. The FPA also carries out all advertising. Only the distribution system varies. Five districts were assigned to the experimental (commission agent) system managed directly by the FPA. Five districts continued the system which has been in operation since the beginning of the project in 1973. Under the new commission agent system, the FPA assumed responsibility for the distribution of contraceptives; appointed a marketing officer (FPA staff member) in each of the 5 experimental districts; and selected commission agents (wholesale commercial outlets) in each district to distribute contraceptives to retail outlets.

In the control area (Principal Agent System), continued in 5 districts, the FPA supplies contraceptives to one commercial agent in Colombo. This principal agent then supplies contraceptives as well as a large line of other products to wholesale distributors in each of the 5 districts. This wholesale distributor in turn supplies contraceptives to retail outlets in the district. FPA staff are not involved in this chain of distribution.

The original design for the comparison of condom sales remains the same, but the sales program for oral contraceptives has been changed. In 1980, the FPA took over nationwide

distribution for all oral contraceptives through its marketing officers and through a part-time Medical Representative added to the FPA staff. Sales have increased significantly since this change.

During this reporting period, the FPA has continued to pursue the original project goals of an increased number of sales outlets, increased sales, and sufficient revenues to cover operating costs of the program. More than 380 new outlets have been opened during the past year, primarily in rural areas, where both number of outlets and sales have increased most during the project. Sales of both condoms and oral contraceptives, up during the first three quarters of 1981, experienced an anticipated drop following a price increase Oct 1, 1981, but have risen during the first half of 1982. The continued increase in revenues has permitted the project to cover a larger proportion of its operating costs.

In addition, during the past year, the FPA has introduced several new products, and has begun development of several new strategies for strengthening the program and for linking it more closely to community based activities. Project staff have worked on the development of a number of village-level programs and new strategies for marketing contraceptives facilitated by reorganization of the FPA structure to include the chairpersons of the District Action Committee. The village distribution schemes include direct contraceptive sales arrangements with village storekeepers, ayurvedic practitioners and cooperative unions. Additional schemes for linking sales to village level development and income generating activities, and to traditional marketing

and promotional channels -- such as village market hawkers and plays -- are under exploration.

Budget Summary
 Subcontract #4 (Sri Lanka)
 7/1/81 - 6/30/82

<u>Category</u>	<u>Budget*</u>	<u>Expenditures</u>
Personnel	\$4,100	\$5,561**
Office Expenses	\$3,200	\$2,964
Travel and Per Diem	\$7,925	\$8,469**
Promotional Expenses	\$30,000	\$46,053**
Packing and Distribution	\$46,338	\$36,974
Evaluation	\$23,980	\$23,551
Training	\$7,000	\$1,890
Administration	<u>\$13,791</u>	<u>\$10,872</u>
TOTAL	\$136,334	\$136,334

* Prorated from original budget with different fiscal year divisions.

** Budget deviation approved by CPFH.

5. Masai Health Services Project, Arusha, Tanzania.

In April of 1982 an agreement was reached between the Evangelical Lutheran Church of Tanzania, Synod in Arusha Region (referred to as the Synod) and the Center for Population and Family Health to provide assistance to the Masai Health Services Project of the Synod. The Masai Health Services (MHS) project is a primary health care project which trains Village Health Workers (VHWs) in basic preventive and curative medicine. CPFH is to provide technical assistance, especially in developing an evaluation and operations research component. CPFH will also

provide assistance in strengthening several other components of the project including the provision of maternal and child health, family planning services, training and supervision. The funding began on April 1, 1982 and will extend until June 30, 1984. The project will have a phased approach with an initial evaluation after eight months.

In all seven project areas, people will be provided with basic health care and health education by the boma health workers. When required, referrals will be made to health centers in their communities. Birth spacing will be among the services which this project will attempt to provide. Given the government's interest and efforts in developing a primary health care plan for the country, the project could provide some timely information on particular approaches and strategies that should be utilized.

From February until June the MHS project staff (with technical assistance from CPFH) designed two training curricula: one for trainers and one for VHAs. A refresher course for dispensary workers is currently being developed. The objectives of this course will be to review what was learned in previous training, and to emphasize preventive medicine in community-based services. Also during this time an evaluation/operations research design framework was created for the project. The evaluation design consists of detailed plans for conducting pre- and post-training tests and for the collection of baseline and follow-up survey data. The operations research design contains detailed plans for studies of program options and naturally-occurring variations, including training program options and

variations in community support and personal characteristics of VHWs. These activities have led to an improved project design.

Two MHS project staff attended the CPFH June Training Course in 1982. This experience, together with working with CPFH staff on project design, has improved their capacity for planning and implementing a primary health care project.

With the additional funds provided by the subagreement, the MHS project has engaged a project coordinator, one evaluation assistant, and one training/evaluation assistant. At present the staff is recruiting locally for an additional evaluation assistant.

To date, several steps have been taken to improve the existing system of operation. The data collection and recording systems have been reviewed and revised to provide more accurate and useful service statistics. In addition, an inventory system has been developed to help relieve supply shortages in the village dispensaries. Meetings to discuss the project were held with appropriate government medical and health officials. They welcomed the project and expressed a desire for progress reports.

During the first phase of the project, VHWs in one small area will be trained so that the course can be evaluated and modified for the next phase when more villages and villagers will be involved. In one of the project communities, Engasmet, meetings were held where the villagers discussed their health problems and possible solutions. At their suggestion, it was decided that some villagers be trained to treat sick people. They agreed that health education should also be included. After

discussing the desirable qualities of a health worker, the villagers selected people they felt would be suitable. The villagers agreed that the MHS project would train the workers, but that the village would provide support for them both during and after training. Additional workers are to be chosen in a neighboring village, Kitwal, which has also been contacted by MHS project staff.

With the help of the candidates for training, MHS project staff mapped the housing units, bomas, in Engasmet village and enumerated the number of houses and adults in half of the units. The mapping will be completed by the trainees themselves during the practical field training segments of the course.

Since securing a doctor on the Synod staff, family planning services have been available at one of the Synod's dispensaries (Selian). A small number of people are now regularly receiving family planning services at this dispensary. Most of these are previous users of contraceptives who have transferred from clinics in Arusha town, some twelve miles away. This initial acceptance of family planning in Selian is promising in an area with minimal contraceptive prevalence. Two of the nurse midwives at Selian Dispensary have had additional training in family planning, and are now able to screen potential acceptors. The Selian dispensary will be a model for other project areas.

Because the project has been in operation only a short time, there has been little measurable impact. However, it is significant that family planning services are now being offered at the Selian dispensary for the first time. Even though little effort yet has been given to recruiting new acceptors, people are

using this service. Within this area particularly, the project could have a significant impact on family planning practices.

Budget Summary
Subcontract #7 (Tanzania)
4/1/82 - 6/30/82

<u>Category</u>	<u>Budget*</u>	<u>Expenditures**</u>
Personnel	\$6,460	\$2,500
Training and Retraining	\$2,434	\$800
Project Development	\$2,421	\$800
Transportation	\$823	\$275
Evaluation	\$1,908	\$500
International Travel	\$4,918	\$ 0
TOTAL	<u>\$18,964</u>	<u>\$4,875</u>

* For period 4/1/82 - 11/30/82
** Estimated 4/1/82 - 6/30/82

B. SUPPORT TO OTHER FAMILY HEALTH PROJECTS

1. Operations Research on Low-Cost Delivery of Maternal and Child Health and Family Planning in Rural Haiti, Port-au-Prince, Haiti.

Since January 1978, a major CPFH activity has been monitoring and evaluating an experimental community-based household distribution of contraceptives project in Haiti. Dr. James Alliman, former resident advisor for the Haiti Fertility Survey, has been the CPFH representative based in Port-au-Prince at the Division d'Hygiene Familiale since July 1979.

The goals of the household distribution project have been

(1) to provide family planning services door-to-door in three rural areas of Haiti: Fond Parisien, St. Marc and Leogane; (2) to assess interest in modern contraceptives in rural areas; and (3) to experiment with various approaches to non-clinical contraceptives delivery using specially trained community workers.

This project ended 31 December 1981. Much of the year's activities were centered on preparing reports, presentations, a slide show and monitoring field activities. The project results are available both in the form of a final report and a paper to be published in Studies in Family Planning. Efforts are being made to assure that the relevant lessons learned from this project are integrated into national family planning policy and programs.

The project clearly indicated that in rural areas there is great interest in using modern contraceptives once they are made easily available. Acceptance and use rates were high in the project areas, especially when a liberal approach to distribution was allowed. Pregnancy prevalence declined considerably, suggesting a demographic impact. No negative impact on the duration of breastfeeding was observed and the program was increasingly cost effective as it developed. As a follow-up to door-to-door distribution, reliance was placed on family planning groups led by volunteers who maintained home depots. This appears to be an effective means of continuing resupply after initial household distribution finished. Ways of incorporating these lessons into the ongoing health service program of the Ministry of Health are currently being developed

as part of a new operations research project.

The new OR project ("Operations Research on Low-Cost Delivery of Maternal and Child Health and Family Planning in Rural Haiti") was approved by AID/Port-au-Prince and the Haitian Ministry of Health on 1 October 1981. It is scheduled to run for three years and will require considerably more Haitian involvement than the Household Distribution Project. A project assistant will have responsibility (with the assistance of the Columbia University resident advisor) for the day-to-day project activities. The major focus of field activity will be in the South Region (population of over 1 million) where in-depth analysis of on-going community-based programs is planned. There will also be baseline and follow-up surveys to test the impact of several primary health care interventions (contraceptive distribution, nutrition surveillance, ORT, immunization) using different types of personnel (health center staff with health agents and volunteers versus an approach without volunteers) and service delivery systems (rally points versus health centers with health agents doing outreach).

A planning workshop will be held in 1982, in Les Cayes, to (1) reinforce and disseminate the findings from the household distribution project and (2) prepare for field activities in the region. This project will include a major nutrition surveillance component. Surveillance activities are already underway, with technical assistance from Management Sciences for Health.

As part of the start-up phase of the OR project, key staff members of the Division d'Hygiene Familiale, (D. Adeline Verly,

Assistant Director, Dr. Wooley Dieudonne, Chief of Community-based Activities) traveled with Dr. Allman to Indonesia and Thailand in November and December 1981 to observe low-cost primary health care and family planning activities. An additional visit is planned for the regional health personnel directly involved in the project and the project assistant. During a field visit to Chiang-Mai, Thailand, the DHF group was very impressed with the success of the injectable contraceptive program, which has been operating for 18 years. As a result, plans are being developed to introduce DMPA in Haiti. These plans will be discussed in detail during the July 1982 visit to Haiti, at the invitation of DHF, of Dr. Edwin McDaniel from Chiang-Mai.

In 1981-1982 the CPFH adviser worked with colleagues at the DHF and the Haitian Institute of Statistics on the analysis of the 1977 Haiti Fertility Survey. These results were presented at a national meeting in October 1981. In addition, considerable effort was made by CPFH to rapidly process and analyze data from a CRESH (Center for Social Research) survey of attitudes and interest in commercial retail sales of contraceptives in urban Haiti. Assistance in questionnaire design, sampling, and field work was provided. Several meetings were held in early 1982 to help organize a major Haitian commercial retail sales program. The CPFH also processed the 1981 South Region Nutrition Survey which will be a baseline for the nutrition surveillance project.

The new OR project requires capacities to do research and organize field activities beyond those available at the DHF.

Consequently, important efforts are being made to collaborate with local researchers and institutions. A study of mother's attitudes concerning infant diarrhea was conducted with the Center for Applied Linguistics and Social Studies. This institution is also helping the DHF with a study of attitudes toward menstruation in Haiti and their effect on the acceptability of various modern contraceptives. A survey of commercial retail sales of contraceptives was carried out in collaboration with the CRESH. Discussions are also underway to work out collaboration with the Haitian-Arab Medical Social Complex to assist them in the evaluation of their program to provide primary health services using community volunteers to an urban slum population of 100,000. In addition, the DHF will conduct a contraceptive prevalence survey supported and assisted by Westinghouse Health Systems that will entail CPFH collaboration. Frequent contact and active collaboration continues with the Rural Health Delivery Project, supported by MSH technical assistance.

The CPFH advisor has also been active in preparing and providing research assistance on a broad range of topics related to health, nutrition and population dynamics (Haitian migration patterns, age at menarche and fertility, union patterns, etc.) to USAID, U.S. Embassy, UN personnel and other interested researchers. Dr. Maryse Pierre-Louis, who will share with Dr. Allman responsibility for administrative and technical aspects of the program, provides the project with a variety of talents. She will be giving particular attention to the public health aspects

of the project, including oral rehydration and family planning, as well as to data analysis and documentation.

2. **Community-Based Family Health Project, Khartoum, Sudan.**

The Sudan Community-Based Family Health Project is funded by a grant from the AID Population Office Research Division to the Faculty of Medicine of the University of Khartoum. The project is administered by the chairman of the Department of Community Medicine, Dr. Abdel Rahman El Tom, in close collaboration with the Ministry of Health. The goal of the project is to test a model of maternal and child health and family planning service delivery utilizing government trained village midwives as service providers.

The Community-Based Family Health Project began operation in April 1980. Currently in its third and last year, this three year project has trained a total of 103 midwives and 50 rural health workers in family planning, oral rehydration therapy, nutritional education, and immunization. Service delivery began in March 1981, with three rounds of household canvassing by the midwives. Village women are being provided oral contraceptives and oral rehydration salts through the project. Pre-test and post-test surveys of village women have been performed and are currently being processed and analysed.

The three rounds of household visits conducted by project midwives focused in turn, on diarrheal care, family planning, and nutrition education. The last round was completed in early June 1981. One-day refresher courses held in each village health facility preceded each round. Immunizations were administered by Ministry of Health vaccination teams concurrently with the

refresher courses. A mini-survey was conducted during the third round of household visits to assess the initial impact of the previous rounds. Although the data are not conclusive, the mini-survey results suggest that the midwives achieved a remarkable degree of coverage and success in their efforts to educate villagers about oral rehydration therapy. Initial results concerning the family planning round were also promising, though less consistent.

In June 1981, project supervisors initiated a series of meetings and field trips with the Ministry of Health supervisors responsible for health services in the project area. These dispensary inspectors and health visitors have been involved with the project almost since its inception. The goal was to hand over the administration of the project to the Ministry of Health. The performance of these individuals has, however, fallen short of expectations. Efforts are now being made to devise an alternative supervisory arrangement.

Data from the base-line survey underwent a careful cleaning process under the supervision of resident CPFH advisor M. Haytham Matthews. It is currently being analysed and preparation of a report will begin during September, 1982. The post-test survey of village women was completed in January, 1982. These data have now been put on computer cards and data processing is currently underway. While final editing is not completed, Tables 4 and 5 provide a preliminary indication of increases in contraceptive prevalence in the project area.

Table 4

Contraceptive Prevalence Rates of Project Area Women* Before and After the Introduction of Community Contraceptive Services

	<u>Pre-Survey</u>	<u>Post-Survey**</u>	<u>Relative Percent Change</u>
Peri-Urban*** Communities	15.8% (118)	16.8% (133)	6.3%
Rural Communities***	5.7% (53)	10.6% (100)	86.0%

Table 5

Oral Contraceptive Prevalence Rates

	<u>Pre-Survey</u>	<u>Post-Survey**</u>	<u>Relative Percent Change</u>
Peri-Urban Communities***	13.6% (102)	14.0% (111)	2.9%
Rural Communities***	4.6% (43)	8.6% (81)	86.9%

- * Presently married women 15-50 years of age
- ** 1 year after the introduction of contraceptive services at the village level
- *** The variable located on paved or unpaved roads was used as an approximate

As can be seen, project services have had a significant impact on contraceptive prevalence in rural areas, while peri-urban areas have shown little increase. Factors which may have inhibited acceptance increases in the peri-urban communities include: 1) A relatively high ratio of eligible women to midwives; 2) Less unmet need; 3) Existing access to services which would compete with project services; and 4) A less traditional social structure which includes less reliance on

midwives as sources of information and service.

Project staff began a variety of small scale research and evaluation activities in the spring of 1982. Among these were an analysis of the project's supervisory and supply systems, a summary of the first year's service statistics, an examination of the nutrition component, a qualitative study of the working relationship between project midwives and community health workers, and a cost analysis of program activities.

The Community-Based Family Health Project may be expanded north into Nile Province. This effort would increase the replicability of the service delivery model by testing a lower cost variant of the original concept. Largely because of changes in currency exchange rates, the project could probably be expanded without additional funds.

Aside from the proposed expansion, other evidence of impact on Ministry of Health programs is beginning to appear. Project field supervisors have lectured to midwife trainees at the Khartoum delivery schools at the administrator's request. The training curriculum for project midwives has been used for training of health visitors through the government's WHO sponsored Maternal Child Health pilot program. Finally, during the Second National Population Conference held in April 1982, the Minister of Health referred specifically to the Community-Based Family Health Project as a model for the other MCH programs in the Sudan.

The Center's resident advisor to the Sudan Community Based Family Health project has been working with Project Director Dr. A. R. El Tom and other members of the project staff since April

6, 1980. During this reporting period, he has played an important role in coordinating several research activities including the post-test survey, base-line data processing cost analysis, mini-survey and community health worker study. Mr. Matthews has also assisted the Project Director in a variety of budgeting and financial planning activities, as well as in maintaining communications with the local AID office in Khartoum.

3. Family Health Division, Ministry of Public Health, Bangkok, Thailand.

During 1981-1982, the CPFH continued to provide general technical assistance(TA) in research and evaluation to Thailand. Originally, AID and CPFH agreed on this general TA approach because of the vast number and great variety of research activities going on in Thailand. A recent inventory of newly completed and ongoing population research activities in Thailand revealed 300 studies (many of which are operationally-oriented) from 56 institutions and over 100 researchers. To confine the CPFH and AID assistance to only one of the many applied research projects in Thailand would mean sacrificing valuable opportunities to help integrate the results of related research endeavors. Therefore, the resident CPFH advisor has become involved in promising studies being conducted at the National Family Planning Program (NFPP) of the Ministry of Public Health(MOPH), the university-based population institutes and the innovative private sector associations involved in population research.

The following describes the range of projects and activities

to which the CPFH resident advisor to Thailand contributed over the past year, and presents a review of what has been learned from some research projects completed during this reporting period.

<u>Activity/Project</u>	<u>CPFH Contribution</u>
1. Multi-service mobile van achievement compared with mobile strategies	1. Project proposal staff orientation, monitoring, analysis, write-up
2. National continuation rate analysis of the injectable contraceptive	2. Analysis, write-up
3. National continuation rate survey of pill acceptors	3. Proposal, questionnaire design, data collection, analysis write-up.
4. Trial project to use village drug cooperatives for family planning	4. Proposal, staff orientation, monitoring, progress report and questionnaire design for follow-up (on-going)
5. Investigation into the decline of mobile vasectomy achievement	5. Proposal, questionnaire design, supervision of data collection (on-going)
6. National survey of health and family planning service accessibility and perceptions	6. Questionnaire design, sampling, supervision of field work
7. Review of the status of the Bangkok Metropolis family planning program	7. Proposal, questionnaire design, data collection, analysis, write up
8. International newsletter on injectable contraceptives	8. Soliciting written contributions, editing, distribution
9. Use of village health volunteers for family planning	9. Questionnaire design analysis, and write-up

- | | |
|---|---|
| 10. Norplant pilot project | 10. Analysis, write-up |
| 11. Development of logistics monitoring system for commodity procurement mgmnt. | 11. Form design |
| 12. Experiment to test increased charge for the injectable contraceptive with free PAP smear service. | 12. Proposal (on-going) |
| 13. Study of the impact of different combination of media on family planning knowledge | 13. Proposal, questionnaire design, analysis, write-up (on-going) |

A summary of the present status and results of some of these projects follows:

1. Multi-service mobile van

Until 1979, use of the mobile unit to extend clinical contraceptive services to remote villages was essentially a uni-method approach; only the injectable or vasectomy was offered. To give the rural population greater choice of services, a multi-method strategy was launched in 15 of Thailand's 72 provinces, using local government staff to provide temporary and permanent methods of contraception in one-day clinics. While thousands of new acceptors were recruited, it was difficult to assess whether the project was worth expanding without comparison with other approaches. Fortunately, at the time of this project, three other mobile service strategies were in operation: the McCormick Hospital injectable program; the vasectomy bus of the Community Based Family Planning Services; and the NOPH's vasectomy-only mobile service. In sum, when cost per couple year of protection (CYP) was calculated for each strategy, the multi-method approach turned out to be the most costly -- largely due to the

preponderance of injectable and pill acceptors and not enough IUD and vasectomy acceptors -- thus depressing the total CYP per trip. On the basis of this analysis, the program was discontinued. It appears that a single-method mobile unit that uses intensive motivation (in the case of the IUD or vasectomy), or that returns on a circuit basis (in the case of the injectable), is the most cost-effective approach to providing mobile services in rural areas.

2. Pill user continuation rate survey

When the pill was first provided free through all government outlets, in the fall of 1976,* many observers thought that acceptance might increase but that duration of use would decline. They reasoned that the free pill program would attract users who were not committed to contraception, but instead wanted to take

*Prior to that time a token charge of \$0.25 was requested for each cycle.

advantage of a free service. Indeed, acceptance increased dramatically (by 50% in two months). As a result, the Research and Evaluation Unit of the NFPP felt the need to do a follow-up survey of new acceptors to determine whether continuation had in fact declined. The results were surprising and somewhat contradictory. Continuation rates did decline significantly (to 64% at one year from the previous high level of 72%). However, the survey also discovered that fully 44% of acceptors were paying some fee for the pill despite the MOPH regulations, which explicitly forbid the collection of a fee for the pill. Average price-per-cycle paid by respondents who were being charged was about \$0.20. When continuation rates were analyzed by the price paid, it was found that those receiving the pill free had a one-year continuation of 67%; those paying \$0.05 - \$0.20 had a rate of 65%, while those paying \$0.25 or more had a significantly lower continuation rate (52%).

These findings seem to indicate that when a policy is unevenly enforced, those that pay more will have less achievement (lower continuation) than those who pay the least. If, however, the policy is consistent, as during the fee-for-pill era, then continuation rates may be expected to be higher.

3. Use of village health volunteers (VHV) for family planning

More than 20,000 VHVs have been trained by the MOPH and 30,000 are to receive training in the coming years. The curriculum includes family planning, but it was not known how well the VHVs were performing family planning tasks. Furthermore, some areas allow the VHVs to resupply continuing pill acceptors,

while other areas do not. A probe study was done in one of Thailand's 700 districts to see how the VHVs were functioning and to gather MOPH staff attitudes toward the VHV and vice versa. Within this one district, there were VHVs who were resupplying pill users and VHVs not allowed to do so. In the former case, the district hospital was managing the VHVs; in the latter case the district health office was managing the VHVs.

The most important findings can be summarized as follows: Where VHVs are allowed to resupply the pill, morale is high, relations with the district supervisory staff are good, sharing of the caseload of pill users is significant, and supervisory visits are conducted regularly. Where the VHVs are not allowed to resupply, relations with the district staff are poor, supervision is scant and referrals for clinical family planning low.

Therefore, to the extent that this isolated case is representative, it would appear that giving greater responsibility to village volunteers, such as pill resupply, promotes high staff morale and has the added bonus of decentralizing the task of pill resupply which simplifies the service for district staff and consumer alike.

4. Impact of media combinations on knowledge

While the promotional arm of the NFPP has used a wide range of strategies to motivate users and increase knowledge of contraception, there are no definitive answers to what is the best, most cost-effective combination of media for conveying a message. A study was designed to partially answer this question

by conducting a media blitz in experimental areas of one of Thailand's 72 provinces by using different mixes of media. Radio spots were aired throughout the four experimental areas. In Model A, a mobile IEC unit travelled to villages, posters were put up and local village health volunteers were enlisted to help promote family planning awareness. In Model B only posters were displayed in a wide variety of locations. In Model C, only the mobile unit was operated. Finally, Model D relied solely on the village health volunteers.

Although the results are still being tabulated, the findings seem clear: The models with posters (alone or augmented by a mobile IEC unit and VHVs) are equally and significantly effective in increasing contraceptive knowledge and understanding. The models utilizing only a mobile unit or VHVs had little impact. When the cost component is factored in, the poster only approach is likely to be the most cost-effective.

C. OTHER TECHNICAL ASSISTANCE AND PROJECT DEVELOPMENT ACTIVITIES

1. Bolivia

In Bolivia, Dr. Henry Elkins provided assistance to the Center for Social Studies (CIS) in developing a project to demonstrate the feasibility and acceptability of family planning promotion and services in industrial settings. CIS would work closely with labor unions in presenting seminars on family life and family planning, and would offer contraceptive services both at worksites and in a private clinic. CIS would measure the costs to employers of employee pregnancies, with a view to

encourage employers to assume recurrent costs of the services. This project, scheduled for a possible September 1, 1982 start, is currently under review at CPFH and AID.

2. Burundi

Project development activities in Burundi have resulted in a preliminary proposal for a community based project in that Francophone African country. During visits by Drs. Eugene Weiss and Nicholas Cunningham of CPFH and Dr. Robert Castadot, a CPFH consultant, the opportunity to collaborate with the University of Burundi Department of Community Medicine was identified. The basic objectives of the project would be to improve health services at four rural health centers and to develop an outreach program utilizing volunteer community health workers. A broad range of improved health outcomes are anticipated, including improved maternal/child health; reduction in the incidence of communicable diseases; increased birth intervals through utilization of family planning services; and improved access to drug supplies.

3. Ecuador

In March, Dr. Henry Elkins traveled to Ecuador to discuss possible operations research projects. A potential project in Ecuador is a study of pregnancy related costs of the Ecuadoran Social Security Institute. The study would follow the pattern of the successful study carried out with the Salvadoran Social Security Institute. That study gave major impetus to family planning services as a way of cutting the very high costs relating to pregnancies. Cost data had never before been accumulated and presented in a systematic manner. Juan Londono

(who carried out the Salvadoran study while a CPFH advisor in El Salvador) is now a contract employee with AID/Quito and would participate in the project. The project awaits the signing of a more general agreement between AID and the Ecuadoran Social Security Institute.

4. Guatemala

Pursuant to requests from APROFAM, the Guatemalan Family Planning Association, and USAID/Guatemala, Dr. Jane Bertrand, as a CPFH consultant, has continued her assistance to the Evaluation Division of the Association. On a series of visits, Dr. Bertrand has helped APROFAM improve its collection and analysis of data. Dr. Bertrand was instrumental in helping the Association simplify the service statistics of its community-based distribution programs, changing from a cumbersome system involving new and continuing acceptors to one based on couple-years of protection. The system proved so successful that it was adopted by the family planning associations of El Salvador, the Dominican Republic, and Honduras. With the increasing self-sufficiency of the Evaluation Unit, Dr. Bertrand was able to phase out her technical assistance in 1982.

5. Togo

Visits to Togo for the provision of technical assistance and for project development by Ms. Susan Nalder and Drs. Eugene Weiss and William Van Wie have resulted in a proposal for technical and financial support to the Togolese Ministry of Social Affairs and the Status of Women. The project would consist of the utilization of existing women's self-help groups in rural areas

to more effectively distribute nutrition, primary health, and family planning services. This would be a truly community-based endeavor involving community groups in the promotion and provision of MCH/FP services. The proposal is presently in review at CPFH.

6. Zimbabwe

Dr. T. H. Chimhira, Director of the Zimbabwe Child Spacing and Fertility Association, requested that CPFH provide his organization with technical assistance in developing an effective adolescent fertility program in Harare. This request was made during Dr. Chimhira's participation in the 1982 June Training Course. Specific technical assistance in program development, implementation and management is planned for January, 1983, with particular emphasis on adolescent programs and contraceptive marketing.

D. INFORMATION DISSEMINATION AND TRAINING ACTIVITIES

1. Library/Information Program

In addition to the collection, organization, maintenance and dissemination of technical literature in the fields of family planning, basic health program evaluation, and operations research, the CPFH Library/Information Program has continued to seek innovative means of improving the availability of, and access to, information about experience in operations research.

In this regard, POPLINE-related statistics (i.e., document input and computer searches performed) during FY 1981-82 are displayed in Appendices 1 and 2. Statistics once again indicate an increase in the number of computer searches performed (from 909 in FY 1980-81 to 1616 in FY 1981-82). Over 76% of this

years' searches were provided to requestors from developing countries or LDC-related institutions. The Library also provided over 63,000 photocopies, including the Library Acquisitions List, POP/FAM Alert, and documents in the Library collection.

Active promotion of POPLINE has continued to be a priority particularly since March 1982, when Population Index citations were added to the data base. This fiscal year, CPFH and the Johns Hopkins Population Information Program jointly sponsored POPLINE exhibits at key U.S. population and library conferences, and similar exhibits and demonstrations have been shown in England (at the British Library) and are planned for Paris, Liege, and Amsterdam in 1982-1983.

To maximize the effectiveness and impact of these efforts, a new brochure (which includes information about Population Index materials) has been printed. The first edition of the POPLINE Thesaurus was published in October 1981. 1,140 copies were printed, over 1000 of which had been distributed by June 30, 1982. An updated second edition is planned for 1983 or 1984.

CPFH has also made POPLINE services available to audiences in Latin America and Africa by providing monthly POPLINE searches to DOCPAL (the computerized Latin American Population Documentation system maintained by the United Nations Centro Latinoamericano de Demografia) and PIDSA (Population Information and Documentation System for Africa) in Accra, Ghana. PIDSA and DOCPAL specialize in the collection and dissemination of African and Latin American population literature and rely on POPLINE to verify the comprehensiveness of their collections.

In the fall of 1981, the CPFH Library/Information Program was invited to become a member of the Population Information Network (POPIN) of the United Nations Secretariat. CPFH personnel were invited to provide technical expertise in support of various POPIN activities. Dr. Susan Pasquariella was invited to be a member of two POPIN working groups: 1) the Working Group on the Management of the POPIN Population Multilingual Thesaurus, and 2) the Working Group on the Inventory and Evaluation of Population Information Training Materials. Involvement in both the POPIN and POPLINE Thesaurus Working Groups facilitates bidirectional flow of information and compatible evolution of these vocabularies toward their common goal: a universal population terminology for information dissemination and retrieval.

Library personnel also continue active participation in the Association for Population/Family Planning Libraries and Information Centers - International (APLIC) and assisted in the planning of the 1982 annual conference. Susan Pasquariella also served during 1981-82 on the APLIC Board of Directors and was elected to serve as APLIC First Vice-President during 1982-83.

2. Project Documentation

As the projects to which the CPFH provides support have developed to a level from which meaningful observations and conclusions can be drawn, professional staff and collaborating investigators have devoted increasing attention to documentation of various field experiences. A working paper series has been established which will gather the observations of staff involved in overseas projects on single topics. Papers intended for

Journal publication or conference presentation are being produced in increasing numbers, particularly from those projects well into the data analysis phase (such as Sudan, Haiti, and Brazil). A complete bibliography is attached as Appendix 4.

3. Chartbook

The chartbook entitled Family Planning: Its Impact on the Health of Women and Children which was produced in 1981, has met with an overwhelmingly positive response from developing country health care providers. The original printing of 30,000 copies lasted less than one year. Of these 30,000 copies, 24,000 were distributed in a mass mailing using selected categories of labels from the Population Information Program's much larger mailing list. The other 6,000 were mailed out from CPFH in response to requests from all over the world. More than 80 percent of all copies were sent to developing countries. Letters of appreciation, citing the usefulness and timeliness of the chartbook, were received from agency heads and midwives alike. A second printing to meet continued high demand is planned. The chartbook was translated and printed in French during this reporting period, for primary distribution in Francophone Africa. To date, nearly 5,000 copies have been distributed in developing countries. Publication of a Spanish version is expected in September, 1982.

4. International Staff Retreat

During May 25-27, 1982, CPFH staff members posted overseas joined New York based staff for three days of meetings and working sessions. The Retreat provided an opportunity for the introduction of new staff members; the discussion and resolution

of problems common to overseas staff, as well as in-depth discussion of a number of substantive issues of importance in all projects. Panel discussions focused on the following topics: 1) Strategies for more effective training of project personnel; 2) Strategies for more effective supervision of project personnel; 3) Integrating operational research into service delivery programs; and 4) Methodologies for cost-effectiveness analysis. Results of the panel discussions on training and supervision are being prepared as CPFH Working Papers.

5. June Training Course

During June 1-25, 1982, the third annual CPFH training program "Family Planning, Nutrition and Primary Health Care in Developing Countries: Program Design, Management and Evaluation" was held, with primary funding from the Rockefeller Foundation. The participation of five people associated with collaborative projects was funded through the Cooperative Agreement: Dr. Maryse Pierre-Louis (Haiti), Mrs. F.B. Jaiyeoba (Nigeria), Mrs. D.O. Owodumilehin (Nigeria), Mrs. I.B.A. Ladipo (Nigeria) and Dr. E.M. Nangawe (Tanzania). An additional nine people, all associated with projects receiving support from Cooperative Agreement funds, attended the course with sponsorship from other sources. Thus, the June training program continued to provide major complementary support to other CPFH international activities.

The success of this training activity has led to the approval of a new Cooperative Agreement between CPFH and the AID Africa Bureau which will support Africa-oriented, bilingual New

York-based courses in 1983 and 1984, and courses in a workshop format to be conducted in a number of African Countries. This new Agreement promises to complement the Center's growing program of work in Africa to an even greater extent.

APPENDIX 1

LIBRARY STATISTICS
FISCAL 1981 AND 1982 COMPARISON*

	1981	1982
<u>ACQUISITIONS:</u>		
Number of Monographs and Reprints Received	228	301
Number of Journal Issues & Newsletters Received	1468	1451
<u>INDEXING AND ABSTRACTING:</u>		
Number of Documents Sent for Keying (Indexed & Abstracted)	1731	1808
<u>REFERENCE:</u>		
Computer Searches	909	1616
<u>CIRCULATION:</u>		
Interlibrary Loans Completed	322	386

* Statistics for 1981 include figures for 7/1/80 - 6/30/81
Statistics for 1982 include figures for 7/1/81 - 6/30/82

APPENDIX 2

GEOGRAPHICAL DISTRIBUTION OF
COMPUTER SEARCHES
JULY 1, 1981 - JUNE 30, 1982

Month	N.A.& U.S.	Europe	Asia	Africa	Latin America	International Agencies
July	15	7	52	18	7	5
August	19	8	26	29	6	5
Sept.	25	12	58	20	9	17
Oct.	39	7	42	14	6	43
Nov.	43	6	41	15	12	4
Dec.	12	7	58	24	9	6
	153	47	277	120	49	80
Jan.	21	7	54	18	10	1
Feb.	15	6	56	14	7	10
Mar.	29	14	71	37	16	7
April	15	12	79	35	15	9
May	12	7	60	21	7	17
June	27	11	89	52	23	6
	199	57	409	177	78	50

TOTAL NUMBER OF COMPUTER SEARCHES PERFORMED (7/1/81-6/30/82) = 1616

U.S. & North American Requesters	=	272 (16.8%)
European Requesters	=	104 (6.4%)
Asian Requesters	=	686 (42.5%)
African Requesters	=	297 (18.4%)
Latin American Requesters	=	127 (7.9%)
International Agency Requesters	=	130 (8.0%)
Asian, African, Latin American and International Agency Requesters	=	1240 (76.7%)

APPENDIX 3

AID FUNDED INTERNATIONAL TRAVEL 7/1/81-6/30/82

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
J. Bertrand	Guatemala	10/21/81-10/30/81	To provide technical assistance in data analysis to the APROFAM Evaluation Division
	Honduras Guatemala	3/20/82-3/31/82	Honduras: To provide technical assistance in the development of simplified clinical record systems for use in several Central American family planning programs and to assist in the formulation of evaluation plans for commercial retail sales systems. Guatemala: To complete CPFH-sponsored technical assistance in data analysis to the APROFAM Evaluation Division.
R. Castadot	Burundi	3/17/82-3/29/82	To work with Dr. Gene Weiss in the exploration and development of operations research and technical assistance activities in Burundi.
N. Cunningham	Nigeria Burundi	5/17/82-5/19/82	To assist in the development of the medical service component of an OR project in Burundi, and to assess the adequacy and make recommendations for the improvement of the CBD medical services in the Nigeria project, especially the treatment of diarrhea and worms.
S. Edelman	Tanzania	9/19/81-9/26/81	To assess the need for CPFH assistance in providing operations research input and financial support for the Masai Health Services Project of the Lutheran Synod in Arusha, Tanzania; to assist Synod staff in the development of a proposal to secure CPFH assistance and support for this project.
H. Elkins	Mexico	7/20/81-8/6/81 10/18/81-10/30/81	To develop plans and questionnaires for baseline survey, participate in development of new supervision manual, service statistics changes, training plans and logistics options for the pending Chihuahua project.
	Sri Lanka	12/7/81-12/20/81	To review project of the Family Planning Association of Sri Lanka to date and discuss changes in project design and evaluation.

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
H. Elkins(cont'd)	Ecuador; Bolivia; Peru.	3/17/82-3/31/82	<p><u>In Ecuador:</u> to explore potential operations research with Dr. Kenneth Farr and others;</p> <p><u>In Bolivia:</u> to assist in the revision of a proposal by CIS (Center for Social Studies -- Dr. Antonio Cisneros) for an experiment in providing family planning services for employees of La Paz industries and a study of costs and cost savings for employers related to such services.</p> <p><u>In Peru:</u> to investigate the possibility of operations research with private organizations in that country.</p>
M. Gorosh	Brazil	8/18/81-8/29/81	To monitor progress on new Piaui Research Design; monitor financial status of no cost extension; review plans for advisor phase out; discuss of possible collaborative activities beyond 12/31/81; participate in OR Seminar in Brazil. Assist in the development of OR and service program for the period starting July 1, 1982
		5/2/82-5/14/82	
S. Isaacs	Guatemala	7/27/81-8/8/81	To assist APROFAM in assessing and improving the supervision of the organization, particularly regarding supervision of rural distribution programs.
	Thailand Burma Nepal	4/16/82-5/1/82	To review the programs of and provide technical assistance to the Asian Training Center in Bangkok pursuant to January, 1981 agreement with Pathfinder Fund; to review the activities of Center staff associate Mr. Tony Bennett and provide advice and assistance as needed; to explore possibilities for community based operation research projects in Burma and Nepal with local AID officials and potential host country counterparts that they may designate.
D. Laura	Sudan Tanzania	9/7/81-9/26/81	To visit the Sudan Community-Based Family Health Project to review and assess project expansion possibilities; visit Tanzania to assess possibility of CPFH providing documentation and evaluation acceptance for Masai Health Services Project.

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
D. Lauro (cont'd)	Tanzania, Sudan, Nigeria.	11/29/81-12/16/81	To assist in developing an appropriate research design for possible CPFH input into the Lutheran Synod Masai Health Services Project in Arusha Region; b) to provide assistance in preparing a proposal to secure such assistance. To assess in the Sudan the status of a proposal requesting an extension of the Community-Based Health Project into a new area; b) to provide assistance with the follow-up survey. In Nigeria, to discuss with University College Hospital staff and Oyo State Government officials a proposed expansion of the Ibadan Community-Based Health Project.
	Sudan	3/13/82-3/28/82	To focus attention upon and provide assistance in preparing a proposal for expanding the Sudan Community-Based Family Health Project.
	Brazil	5/2/82-5/7/82	To participate in an OR Seminar in Brazil. Assist in the development of OR and service programs for the period starting July 1, 1982.
S. Nalder	Haiti	7/27/81-8/17/81	To review the proposed rural MCH/FP operations research project design with government and USAID/Haiti officials; to assist in preparation of a detailed first year work plan; to orient new CPFH staff to existing community-based MCH/FP services in selected rural areas in Haiti.
	Togo, Ivory Coast, Burundi, Tanzania	11/29/81-12/16/81	To attend the APHA sponsored training program for USAID Health-Population-Nutrition officers and counterparts in Lome; to meet with Mr. W. Bair of REDSO and other appropriate AID personnel in Abidjan to discuss project development possibilities in Burundi with Dr. C. Aquillone and appropriate officials of the Ministry of Health; to assist with the development of a proposal for operations research input from CPFH to the Masai Health Services Project of the Lutheran Synod in Arusha, Tanzania.

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
S. Nalder(cont'd)	Haiti	1/11/82-2/7/82	To review with Haitian health Officials and USAID/Port-au-Prince staff the new operations research (OR) project and modify it appropriately.
	Tanzania Togo	2/12/82-5/19/82	In Tanzania, to implement the Masai Health Services Project. Specific to provide technical assistance in training and evaluation design. In Togo, to continue project development activities.
S. Pasquariella	Geneva	3/14/82-4/4/82	In Geneva, to attend POPIN (UN Population Information Network) Advisory and Working Group meetings as a technical expert. In Paris, to attend POPLINE demonstration at INSERM MED-LARS centre.
	Paris		
A. Rosenfield	Nigeria	5/8/82-5/15/82	To serve as a member of the U.S. delegation to the National Population Commission, as requested by the Commission and the U.S. Embassy.
J. Ross	Thailand	9/30/81-10/14/81	To provide technical assistance on operations research projects of Population and Community Development Association and assistance to Asian Training Center.
M. Shedlin	Mexico	7/6/81-8/8/81, and 10/18/81-11/2/81	Technical assistance to the DGS and Coordinated Public Health Services of Chihuahua on the Chihuahua Operations Research Project.
	Mexico	11/12/81-11/20/81	To assist in the supervision of the base-line survey in the rural communities in Chihuahua (Chihuahua Project)
	Mexico	2/24/82-3/1/82	To attend to administrative and informational requirements for proper termination of Operations Research Project in the State of Chihuahua.
	Mexico	5/10/82-5/20/82	To review family planning programs with Ms. Maria Mamlouk.
W. Van Nie	Haiti	8/9/81-8/15/81	To discuss project proposal with officials of DHF and with AID/Port-au-Prince staff, and to help develop 18 month year work-plan.

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
W. Van Wie (cont'd)	Sri Lanka	12/7/81-12/20/81	To review project progress, to review operation research findings to date, and to help develop research approach for the remainder of the project, to build on current findings.
	Tanzania, Togo	3/12/82-4/4/82	To review final Masai Health Services project proposal and contract, to assist in the final phase project activities including needs and resource assessments and exploration of options for operations research, and to assist in development of approaches to data collection in this setting. In Togo, to discuss two possible projects with local officials--a community based health service program testing training and service delivery approaches, and a community-based women's group project integrating family health services and economic development activities.
E. Weiss	Nigeria	10/6/81-10/21/81	To consult on community-based family planning/MCH project with Dr. O.A. Ladipo and his staff. Work on service statistics system. Assess the acceptability of Ms. Priscilla Randall as long term project coordinator. Evaluate housing and other needs of the position.
	Nigeria	2/17/82-3/29/82	To review progress of Ibadan CBD project and to assist in the design of a proposal for an expansion of services in collaboration with Oyo State government, to discuss the development of CBD projects with several organizations in Burundi, and to meet with officials of AID, IPPF, FPIA and Pathfinder Fund in Nairobi.
	Togo Burundi Nigeria	4/30/82-5/6/82	To finalize proposal for expanded CBD project (Nigeria), to further develop a proposal for an OR project in Burundi, and to consult on evaluation aspects of an OR project in Togo.
J. Wray	Mexico	7/26/81-8/31/81	To collaborate with Mexican program personnel on the New Strategies Final Evaluation Report; to assist with final revisions of a proposal for operations research to be carried out in Chihuahua; to respond to the Rural Health Program director's request for

<u>Staff Member</u>	<u>Destination</u>	<u>Dates</u>	<u>Purpose</u>
J. Wray (cont'd)			technical assistance; to provide technical assistance at the National Family Planning Coordination relative to their future research direction.
	Haiti	8/9/81-8/15/81	To review with officials of the Division D'Hygiene Familiale and the Department de la Sante Publique and modify the proposed project for operations research on community-based distribution of low-cost family planning and MCH services in rural Haiti.
	Mexico	10/25/81-11/6/81	To provide technical assistance to the DGS and Coordinated Public Health Services of Chihuahua on the Chihuahua Operations Research Project. To participate in the International Symposium on Advances in Family Planning on invitation from Dr. Carl Walther.
	Haiti	1/25/82-2/5/82	To join Susan Nalder and Elizabeth Maguire in a review of the new OR project in Haiti; to work with local staff in developing a detailed work plan for the project and in planning the Project Seminar.
	Haiti	3/29/82-4/2/82	To review with Haitian and USAID staff the progress to date and update the work plan; and to continue to explore incorporation of family planning activities in the Nutrition Surveillance Project.

APPENDIX 4

CPFH Publications 1979-1982

BRAZIL

Articles and Books

Gorosh, M., J.A. Ross, W. Rodrigues, and J.M. Arruda. "Brazil: community-based distribution in Rio Grande do Norte." International Family Planning Perspectives 5(4):150-159, Dec. 1979.

Rodrigues, W., J.M. Arruda, L. Morris and M. Gorosh. Pesquisa sobre Saude Materno-Infantil e Planejamento Familiar, Piaui 1979. Rio de Janeiro, Sociedade Civil Bem-Estar Familiar no Brasil (BEMFAM), March 1981.

Foreit, J. R., et al. "A cost-effectiveness comparison of service delivery systems and geographic areas in Piaui State, Brazil." In Evaluating Population Programs: International Experience with Cost-Benefit and Cost-Effectiveness Analysis, I. Sirageldin and D. Salkever (eds.) Boston: M.I.T. Press (in press)

Conference Papers

Rodrigues, W., J. M. Arruda, and M. Gorosh. "New directions for CBD (community-based distribution) in Brazil." Paper presented at American Public Health Association Annual Meeting, New York, Nov. 1979.

Rodrigues, W., L. Morris, J.M. Arruda, M. Gorosh, J.E. Anderson and H.C. Chen. "The importance of conducting a baseline survey prior to the initiation of community-based distribution program." Paper presented at American Public Health Association Annual Meeting, Detroit, Oct. 1980.

Rodrigues, W., J.M. Arruda, L. Morris, B. Janowitz, M. Gorosh and H. Goldberg. "Contraceptive practice and CBD program impact in northeast Brazil." Paper presented at American Public Health Association Annual Meeting, Los Angeles, Nov. 1981.

GUATEMALA

Articles and Books

Bertrand, J., M.A. Pineda and R. Santiso G. "Ethnic differences in family planning acceptance in rural Guatemala." Studies in Family Planning 10(8/9):238-245, Aug.-Sept. 1979.

Bertrand, J.T., M.A. Pineda, R. Santiso G. and S. Hearn. "Characteristics of successful distributors in the community-based distribution of contraceptives in Guatemala." Studies in Family Planning 11(9/10):274-285, Sept.-Oct. 1980.

HAITI

Articles and Books

Allman, J. and J. May. "Fertility, mortality, migration and family planning in Haiti." Population Studies 33(3):505-521, Nov. 1979.

Allman, J. "Sexual unions in rural Haiti." International Journal of Sociology of the Family 10(1):15-39, 1980.

Allman, J. (in collaboration with Institut Haitien de Statistique and Division d'Hygiene Familiale staffs) Enquete Haitienne sur la Fecondite: Rapport Principal. London, World Fertility Survey, 1981.

Allman, J. "Haitian migration: thirty years assessed." Migration Today 10(1):6-12, 1982.

Allman, J. and G.F. Celestin. "Use of family planning in Haiti: a comparison of survey data and service statistics." In The Pole of Surveys in the Analysis of Family Planning Programs: Proceedings of a Seminar held in Bogota, Colombia, 23-31 October 1980, A.I. Hermelin and B. Entwisle (eds.) Liege, Belgium: Ordina Editions, published for the International Union for the Scientific Study of Population, 1982, pp. 197-211.

Allman, J. "Estimates of Haitian international migration, 1950-1980." Caribbean Review (in press)

Allman, J. and S. Allman. "Women's status and fertility in rural and urban Haiti." International Journal of Sociology of the Family (in press)

Allman, J. "Conjugal union in rural and urban Haiti." Social and Economic Studies (submitted)

Bordes, A., J. Allman, M.P. Louise and A. Verly. "Household contraceptive distribution in rural Haiti, some lessons learned." Studies in Family Planning (in press)

Bordes, A., J. Allman, J. Revson and A. Verly. "Household distribution of contraceptives in rural Haiti - continuation, cost and efficiency." International Quarterly of Community Health Education (in press)

Bordes, A., J. Allman and A. Verly. "Haiti: the experimental rural household distribution project of the Division d'Hygiene Familiale." In Planificacion Familiar en America Latina: Programas Comunitarios y Comerciales, A. Estrada and M. Sanhueza (eds.) (in press)

Graitcer, P., J. Allman, M. Gedeon and E. Duckett. "Current breastfeeding and weaning practices in Haiti." Journal of Tropical Pediatrics (in press)

Conference Papers

Allman, J. "Les facteurs qui determinent la fecondite en Haiti." Paper presented at Division d'Hygiene Familiale-Battelle Population and Development Policy Program Seminar on Population and Development, Port-au-Prince, April 1981.

INDONESIA

Articles and Books

Suyono, H., N. Piet, F. Stirling and J. A. Ross. "Family Planning attitudes in urban Indonesia: findings from focus group research." Studies in Family Planning 12(12 pt. 1): 433-442, Dec. 1981.

Conference Papers

Rahardjo, P., H. Suyono, J. A. Ross and N. Piet. "The use of surveys for program guidance in Indonesia." Paper prepared for the International Union for the Scientific Study of Population, Committee for the Analysis of Family Planning Programmes Seminar on the Analysis of the WFB Family Planning Module, Genting Highlands, Malaysia, Dec. 1-4, 1981.

KOREA

Articles and Books

Ross, J.A. and S. Madhavan. "A Gompertz model for birth interval analysis: a Korean example." Population Studies 35(3):439-454, Nov. 1981.

MEXICO

Articles and Books

Shedlin, M.G. "Assessment of body concepts and beliefs regarding reproductive physiology." Studies in Family Planning 10(11/12): 393-397, Nov.-Dec. 1979.

Shedlin, M. G. "Notes from a field log: Dona Bernarda at work." Medical Anthropology 5(1), 1981. (Special Issue: Midwives and Modernization).

Shedlin, M. and P. Hollerbach. "Modern and traditional fertility regulation in a Mexican community: factors in the process of decision-making." Studies in Family Planning 12(6/7):278-296, June-July 1981.

Shedlin, M.G. "The traditional practitioner: a resource in the provision of modern health services." History of Medicine in Mexico. Universidad Autonoma de Mexico (in press)

THAILAND

Articles and Books

Viravaidya, M. and M. Potts. "Involving the community - Thailand." In Birth Control: An International Assessment, M. Potts and P. Bhiwandiwala (eds.) Baltimore: University Park Press, 1979, pp. 71-91.

Viravaidya, M. "Self reliance and local support of CBD projects: the Thai experience." Concern No. 13:1-2, Mar. 1979.

Narkavonnakit, T. and T. Bennett. "Health consequences of induced abortion in northeast Thailand." Studies in Family Planning 12(2):58-65, Feb. 1981.

Rosenfield, A., T. Bennett, S. Varakamin and D. Lauro.
"Thailand's family planning program: an Asian success story."
International Family Planning Perspectives 8(2): 43-51, June
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Carter C., J.E. Revson, N. Bhlapijul and R. Bunnag. "Professional
women as volunteers: a case study of the Nurses Association of
Thailand." Studies in Family Planning (in press)

Narkavonnakit, T., T. Bennett and T. P. Balakrishnan.
"Continuation of injectable contraceptives in Thailand." Studies
in Family Planning (in press)

GENERAL

Articles and Books

Darabi, K., S.G. Philliber, and A. Rosenfield. "A perspective on
adolescent fertility in developing countries." Studies in Family
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Gorosh, M., and D. Wolfers. "Standard couple-years of protec-
tion." In Methodology of Measuring the Impact of Family Planning
Programs on Fertility. New York: United Nations, 1979. United
Nations Publication ST/ESA/SER.A/66.

Rosenfield, A. "Health, nutrition, and population: problems and
possible solutions." In Contributions of Science and Technology
to National Development: Proceedings of the Asian Regional
Seminar, New Delhi, 1978. New Delhi: Indian National Science
Academy, 1979, pp. 187-195.

Ross, J.A. "Declines in the age and family size of family
planning program acceptors: international trends." Studies in
Family Planning 10(10):290-299, Oct. 1979.

Solimano, G., and J. Sherman. "Public health considerations in
human lactation." In Breastfeeding and Food Policy in a Hungry
World, D. Raphael (ed.) New York: Academic Press, 1979, pp. 149-
153.

Valentine, C.H., and J.E. Revson. "Cultural tradition, social
change, and fertility in Sub-Saharan Africa." Journal of Modern
African Studies 17(3): 453-472, 1979.

Watson, W., A. Rosenfield, M. Viravaidya, and K. Chanawongse.
"Health, population and nutrition: interrelations, problems and
possible solutions." In Population and Development: Challenges
and Prospects, P. Hauser (ed.) Syracuse, N.Y.: Syracuse
University Press, published for the United Nations Fund for
Population Activities, 1979, pp. 145-173.

Wilkinson, J., editor. Guide to Population/Family Planning Information Sources. Clarion, Pa: Association for Population/Family Planning Libraries and Information Centers--International, 1979. (APLIC Special Publication, No. 2)

Zuga, C., and S. Pasquariella. "Summary report of APLIC questionnaire on access to information." In Proceedings of the Twelfth Annual Conference of the Association for Population/Family Planning Libraries and Information Centers--International. Philadelphia, April 23-26, 1979, J.P. Helde and J. Stanley (eds.) New York: Association for Population/Family Planning Libraries and Information Centers-International, 1979, pp. 22-28.

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Gwatkin, D.R., J.R. Wilcox and J.D. Wray. Can Health and Nutrition Interventions Make a Difference? Washington, D.C.: Overseas Development Council, 1980. (Monograph No. 13)

Gwatkin, D.R., J.R. Wilcox and J.D. Wray. "The policy implications of field experiments in primary health and nutrition care." Social Science and Medicine 14C(2):121-128, June 1980.

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Pasquariella, S.K. and A.W. Compton. "POPLINE, the new file at NLM: a description and hands-on demonstration." In Proceedings of the Thirteenth Annual Conference, Association for Population/Family Planning Libraries and Information Centers-International. Denver, Colorado, April 8-10, 1980, A.B. Burns (ed.) New York: Association for Population/Family Planning Libraries and Information Centers-International, 1980, pp. 18-20.

Rosenfield, A. and D. Maine. "Depot medroxyprogesterone acetate and health: what do the data tell us?" In International Seminar: Recent Advances in Fertility Regulation, Surabaya, Indonesia, December 1980, New Methods of Fertility Regulation. G.I. Zatuchni and C.K. Osborn (eds.) Chicago: Northwestern University, Program for Applied Research on Fertility Regulation, 1980, pp. 85-107.

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APPENDIX

Percentage Level of Effort toward Cooperative Agreement
 Activities of CPFH Professional Staff for Period 1 July
 to 30 June, 1982.

	<u>QUARTERS</u>				<u>Average*</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	
	2	2	2	2	2
Allman	100	100	100	100	100
Baldi	-	-	-	9.83	2.46
Bennett	100	100	100	100	100
Dominguez	60.83	60.83	60.83	60.83	60.83
Elkins	90	90	90	50	80
Elmeshad	30	30	30	30	30
Foreit	83	34	100	100	79.25
Garosh	10	10	10	10	10
Hughes	100	-	-	-	25
Hardy	-	100	100	100	75
Isaacs	70	50	20	35	43.75
Lauro	100	100	100	100	100
Maine	100	100	100	100	100
Matthews	100	100	100	100	100
Nalder	-	100	100	100	100
Pasquariella	80	80	80	80	80
Randall	-	100	100	100	75
Rosenfield	50	50	50	50	50
Shedlin	90	90	60	60	75
Thomas	50	50	50	50	50
Van Vle	60	60	60	60	60
Watson	80	51	-	-	33.75
Weatherly	-	-	60	60	30
Weiss	100	100	100	100	100
Wilkinson	100	100	100	100	100
Wray	50	50	50	50	50

*Computed over entire year even though some staff worked only part of year.