

EP  
FH

AFRICA:

A New Frontier in Family Planning

Lessons Learned from Operations Research



# 936-3030

PNABD-905

**AFRICA: A NEW FRONTIER IN FAMILY PLANNING  
LESSONS FROM OPERATIONS RESEARCH**

---

Report from the  
Operations Research Program  
Center for Population and Family Health  
Columbia University

January 1988

Funded under Cooperative Agreement DPE-3030-A-00-4049  
United States Agency for International Development  
Office of Population  
Research Division

# TABLE OF CONTENTS

---

Preface . . . . .	iii
Family Planning in Africa: A Demographic and Health Challenge . . . . .	1
What is Operations Research? . . . . .	8
Improving Family Planning Services in Africa: Operations Research Addresses the Issues . . . . .	13
- Assisting Family Planning Policy Development . . . . .	17
- Improving Delivery Systems . . . . .	19
- Building Management Capability . . . . .	21
- Increasing Acceptability of Family Planning for the Individual . . . . .	23
- Encouraging the Private Sector . . . . .	24
- Emphasizing Sustainability and Replication . . . . .	26
- Cost Recovery . . . . .	28
- Facing the Challenge of AIDS . . . . .	29
The Future . . . . .	31
Appendix I: References . . . . .	34
Appendix II: List of Current CPFH OR Projects . . . . .	35

## Preface

The Columbia University Center for Population and Family Health (CPFH) has been involved in family planning operations research (OR) in Africa since 1979. Funding for this program has been made available primarily by the Research Division, Office of Population, U.S. Agency for International Development. The CPFH OR staff are a multidisciplinary, multilingual group of professionals who have acquired experience in family planning program development in over 20 African countries, as well as in Asia and Latin America. Despite the cautious approach to family planning exhibited to date by Sub-Saharan governments, there are indications that acceptance of this essential service will increase dramatically in the region during the next decade. The objective of this report is to provide an overview of the Center's OR experiences in family planning, review important insights, and outline a number of challenges that lie ahead.

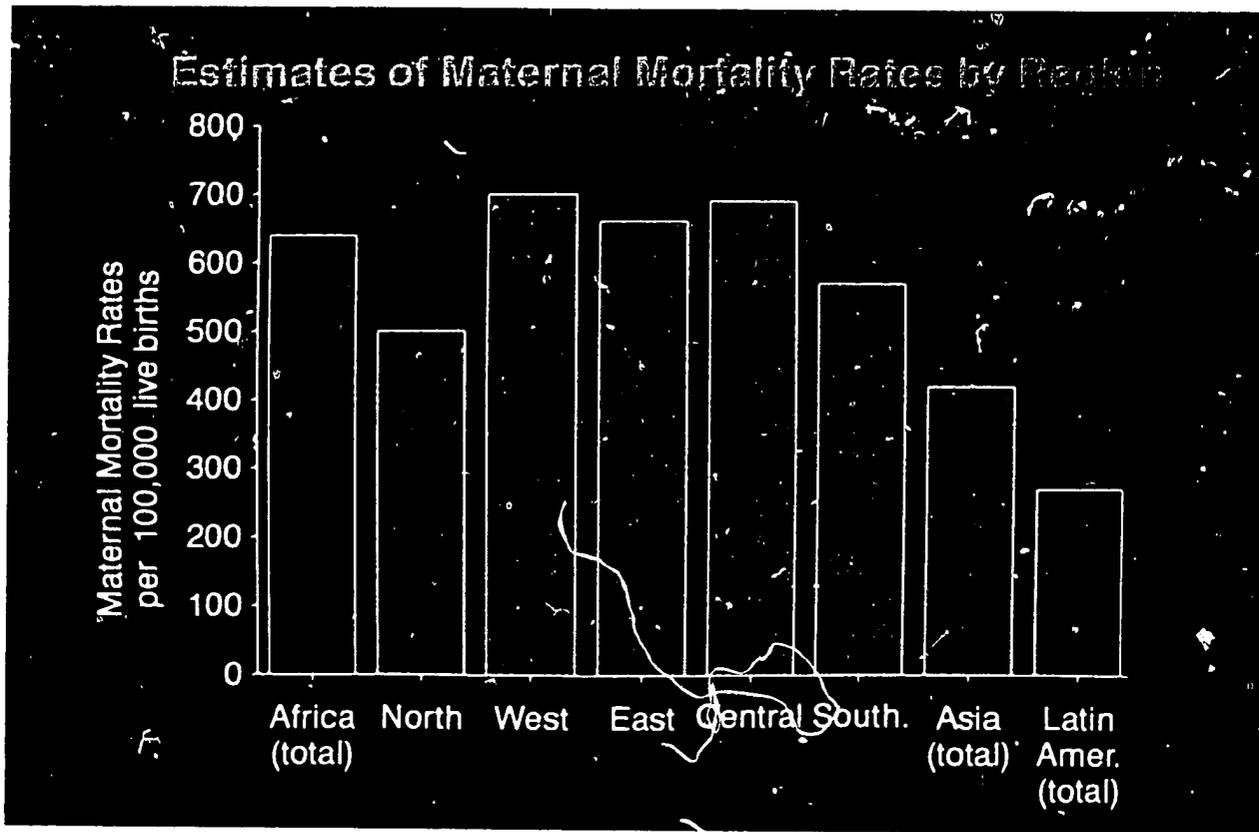
# **FAMILY PLANNING IN AFRICA: A DEMOGRAPHIC AND HEALTH CHALLENGE**

---

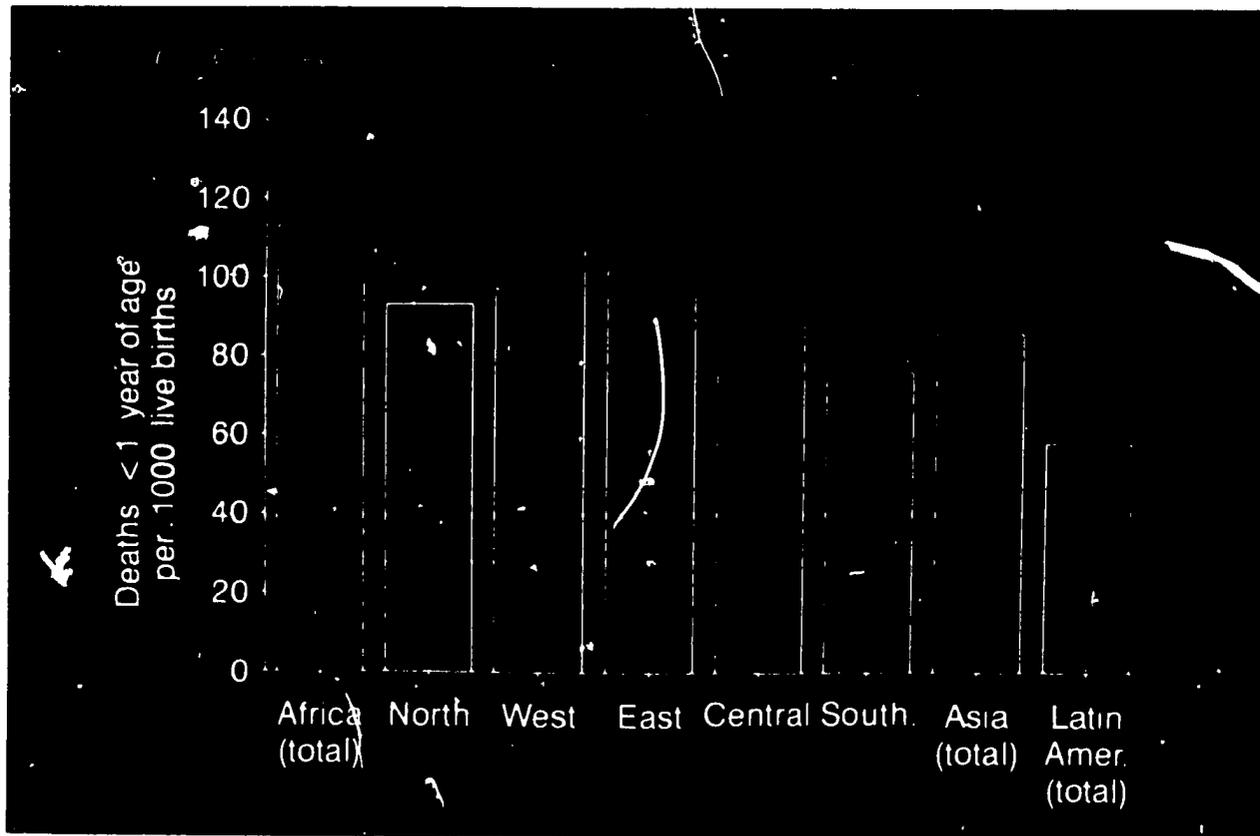
Family planning programs in Sub-Saharan Africa clearly face more difficult challenges than do those in other regions of the world. The 40 countries that make up mainland Sub-Saharan Africa (excluding South Africa), plus Mauritius and Madagascar, have a combined population of 450 million, approximately 10 percent of the world's total. The region is the poorest in the world — the World Bank estimates that more than half of these countries are in the lowest income category among nations, with annual per capita incomes below U.S. \$400. The Sub-Saharan population is predominantly rural, and outreach to many areas is hindered by inadequate roads and transport systems.

Africa's economic situation is mirrored by various indices of health and well-being.

- Health system coverage is poor. Among 18 low-income African countries for which data are available, the population per physician is over 25,000.
- Of a total of 23 countries estimated by the World Bank to have an infant mortality rate of over 120, 16 are Sub-Saharan.
- The World Health Organization estimates that the maternal mortality rate for Sub-Saharan Africa is over 660 deaths per 100,000 live births, compared to 420 for the Asian region and 270 for Latin America.



**Figure 1**



**Figure 2**

---

Population and family planning indicators in Africa are equally disturbing. Sub-Saharan countries already face enormous difficulties in providing basic services for their populations, and these problems are compounded by the fact that the region has the highest rates of natural increase in the world.

- The average annual population growth rate for Sub-Saharan Africa as a whole is approximately 3.0 percent, resulting in a projected doubling time of about 25 years.
- At current rates of population expansion, Nigeria's population is expected to reach 163 million in the year 2000 (up from approximately 100 million in 1985), and Kenya's, 36 million (up from the 1985 level of about 20 million).
- Total fertility rates in Sub-Saharan Africa are very high, reaching 8 in Kenya.

Family planning can play an important role in addressing health and development problems. However, with a few recent exceptions (Botswana, Zimbabwe, Mauritius), estimates of national contraceptive prevalence rates (CPR) for modern methods in Sub-Saharan countries are all below 10 percent and, in most cases, below 5 percent.

Government-sponsored family planning programs exist in just over a third of Sub-Saharan countries. Only thirteen countries had established population policies by 1987.

---

In general, francophone African countries are more conservative than anglophone countries in their approaches to family planning. In a number of the francophone countries, a 1920 law based on the French legal code still prohibits distribution of contraceptive supplies and information. Although the law is often not strictly enforced, it exerts a chilling effect on program development.

Even in countries with national population policies, family planning frequently remains a sensitive area. The current trend in Africa is to incorporate family planning into maternal and child health programs and to promote it mainly as a means of birthspacing for health reasons. Health workers are frequently the only personnel permitted to deliver contraceptives. The lack of such personnel and conservative attitudes on the part of existing service providers limit access to contraceptive services.

It is in this milieu that organizations striving to make family planning available to the African population must work. Despite the obstacles, however, the acceptance of family planning at the political and individual levels is growing in the region. Operations research projects, many of them funded by the Agency for International Development and conducted by a number of institutions including Columbia University, the Population Council, Johns Hopkins University, and Tulane University, have played a key role in testing feasible and acceptable strategies for the delivery of contraceptive services, and in disseminating the results to enhance program replication. The following summary describes lessons learned in the OR projects of Columbia University.



# WHAT IS OPERATIONS RESEARCH?

---

OR is the process of finding workable solutions to problems blocking the effective delivery of health and family planning services. Two steps are required in order to accomplish this broad goal:

1. Diagnosis of service delivery problems and definition of their parameters, using qualitative and quantitative data.
2. Development and testing of potential solutions. This can entail:  
(a) the initiation and testing of new delivery strategies, such as community-based or private sector approaches; (b) adding family planning services to existing public or private health delivery systems and assessing the results; or (c) the testing of improvements involving individual program components, such as comparative studies of alternative approaches to training or supervision. Qualitative and quantitative data are collected to assess the effects of the solutions being tested.

As its name implies, the goals of OR are action oriented. Data collection revolves around the question, "What information is needed to provide better services, and how can this information be collected, analyzed and used?" The OR approach involves the flexible use of multiple research methods, tailored to the needs and capacities of the host organization and suited to the delivery problem being addressed. In the process of testing program solutions via OR, project managers gain experience in the

use of simple and appropriate methodologies for program monitoring and evaluation. Improved evaluation is particularly important in Sub-Saharan Africa, where resources are scarce and should not be wasted on ineffective strategies, but where few managers have experience with program assessment techniques. OR projects thus represent an important component in the process of strengthening institutional capabilities in order to ensure successful family planning service delivery.

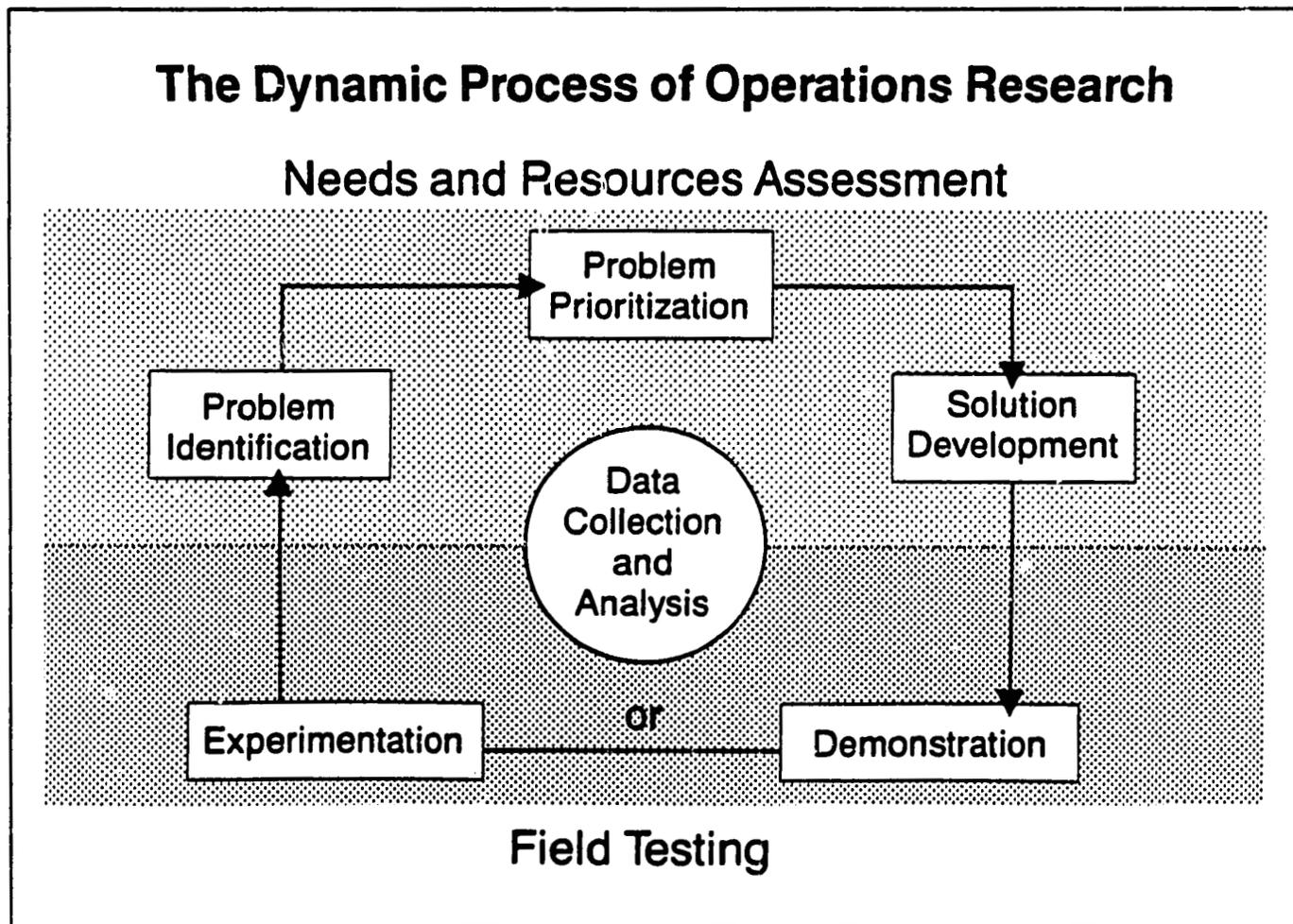


Figure 4

Figure 5

## EXAMPLES OF DATA COLLECTION METHODS

OR provides managers with techniques suitable to the study of a wide range of program issues. To enhance its flexible approach to the study of service delivery problems, operations research has incorporated data collection methods used in routine program assessment, market research, demographic studies, and social science and survey research. Examples of techniques that have been used successfully in projects in Africa include the following:

1. **Service statistics:** Information systems are adapted for use by all levels of workers, including non-literate community agents. The amount of data collected is kept to an essential minimum to allow rapid processing, analysis and use.
2. **Needs and resources analysis:** This broad term refers to various activities used to assess health and family planning needs, and to identify available resources to include in a cohesive program. Data collection methods include analysis of service statistics and inventories, and interviews with health sector personnel and community members.
3. **Focus groups:** In a directed discussion, 6 to 8 individuals from a program target group (such as males or young women) express their attitudes and perceptions regarding a given service or program. The spontaneous interchange between individuals provides insights useful in improving programs.
4. **Client intercept interviews:** Individuals exiting from a setting where program products are available (such as a clinic, pharmacy, or market) are questioned briefly regarding their awareness of the particular products, whether they are users, and whether they have suggestions for improving delivery.
5. **In-depth interviews:** Detailed discussions focusing on attitudes and perceptions are conducted with key individuals before and after project initiation. Respondents can include community leaders, service providers or individuals representative of the program's target population.
6. **KAP (knowledge, attitude, practice) surveys:** Surveys can be administered to both male and female respondents via a number of sampling strategies, including household random cluster sampling and quota sampling.
7. **Minisurveys:** Short, focused survey instruments are administered to small samples (200-500) of target individuals. Minisurveys can focus on many of the same knowledge and practice issues as do full scale KAP surveys. The greatest application of minisurveys is as a tool to acquire information rapidly for management purposes.
8. **Observational studies/Time-motion studies:** Observations conducted in service delivery settings provide managers with data regarding quality of services and program efficiency.
9. **Direct and indirect supervision:** Supervisors or research personnel are trained to observe actual worker/client interactions using an observational checklist, and to interview clients who have previously received a particular service. The research tells managers whether workers are fulfilling their tasks appropriately and whether clients remember and understand the worker's message.
10. **Cost-effectiveness analysis:** This evaluation technique allows managers to determine program costs per unit of service and thereby to choose the delivery strategies that are most financially efficient. Implementing a cost-effectiveness analysis requires the design of specialized record-keeping forms and the training of different levels of personnel in their use.

OR has demonstrated that techniques for the collection of qualitative data, such as focus groups and client intercept interviews, can be used very effectively even in conservative African settings. Minisurveys based on simple cluster sampling have proved effective for data collection in situations where sampling frames are nonexistent and logistics difficult. Just as importantly, experience has shown that these research techniques can be adopted by ministry planners and managers for routine use in program development and monitoring.

### Figure 6

#### RESEARCH DESIGNS

Operations research designs include the following:

1. **Diagnostic projects.** Diagnostic OR is used to define barriers to service delivery and to design potential solutions. It is conducted prior to the initiation of a new program or the implementation of improvements in an existing program.
2. **Demonstration projects.** In this design, a new strategy is implemented and its acceptability, feasibility, and effects are assessed. Such an assessment can include pre-program and post-program surveys to ascertain achievements, including population coverage and effects on community knowledge, attitudes, and practices (KAP) regarding the service being offered.
3. **Field studies or comparison tests.** Two or more populations are offered services via different strategies, and the effects of these differing approaches on coverage and on KAP parameters are compared. Surveys are generally carried out before and after project initiation in all population groups involved.
4. **Quasi-experimental projects.** A quasi-experimental design resembles a comparison test. However, it includes a matched control group that receives no additional services as a result of the project. Surveys are usually carried out among the control group and the service delivery population before and after project initiation. A quasi-experimental approach assists researchers in separating extraneous changes from program effects.
5. **Evaluation projects.** Evaluation projects collect qualitative and quantitative data during and at the end of a service delivery program in order to monitor its process and outputs, to provide information with which to judge its success, and to design future activities.

Diagnostic, demonstration and evaluation projects (see Figure) frequently have the greatest application for program managers and can assist in rapid project replication. Comparison tests and quasi-experimental designs are more complex and costly, and a relatively long period of time is required for the data collection and program comparison phases. The applicability of the last two approaches is limited in the African context, particularly since the resources to develop and compare alternative systems generally do not exist.

**Figure 7**

**An Approach to Selecting an Appropriate Research Design to Address Program Issues at Different Levels of Contraceptive Prevalence**

Contraceptive Prevalence	Family Planning Program Development Needs	Examples of Appropriate Operations Research Designs
0-10%	To demonstrate the feasibility and acceptability of providing family planning services.	<ul style="list-style-type: none"><li>- Diagnostic projects.</li><li>- Small scale demonstration projects.</li></ul>
10-25%	To develop systems for making family planning available on a routine basis.	<ul style="list-style-type: none"><li>- Demonstrations incorporating family planning into broad systems (e.g.: government PHC or MCH delivery, private channels).</li></ul>
20-40%	To test new strategies for the expansion of coverage. To refine and improve existing family planning service delivery.	<ul style="list-style-type: none"><li>- Comparison tests of alternative approaches and new delivery strategies.</li><li>- Diagnostic and evaluation projects within existing delivery programs.</li></ul>
40% +	To improve the efficiency of family planning program operations.	<ul style="list-style-type: none"><li>- Comparisons of variations of particular program components to improve performance and reduce costs.</li><li>- Quasi-experimental designs may be appropriate.</li></ul>

# IMPROVING FAMILY PLANNING SERVICE DELIVERY IN AFRICA: OPERATIONS RESEARCH ADDRESSES THE ISSUES

The CPFH OR program currently has projects in 10 Sub-Saharan countries, in addition to Haiti and Morocco. The program has a professional project development staff of 14, of whom 11 are resident overseas, and a regional office in Abidjan, Côte d'Ivoire.

Figure 8 illustrates the distribution of CPFH OR projects in Africa and Haiti by their research design. Diagnostic and demonstration project designs are most common in the current roster of 22 projects (19 in Sub-Saharan Africa and 3 in Haiti), although a number of comparison projects have been implemented. This distribution of study designs reflects the need to assist African planners and managers in the development of initial, feasible family planning programs on which future large scale programs can be modelled. In most Sub-Saharan settings, basic delivery systems are not yet sufficiently developed to warrant projects which formally study alternative service delivery strategies.

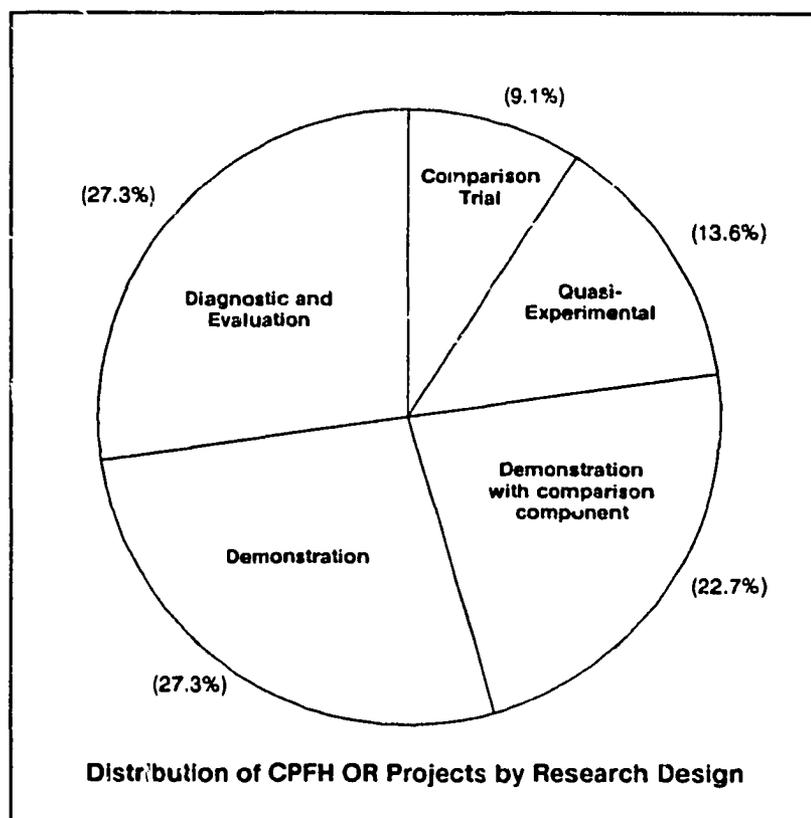
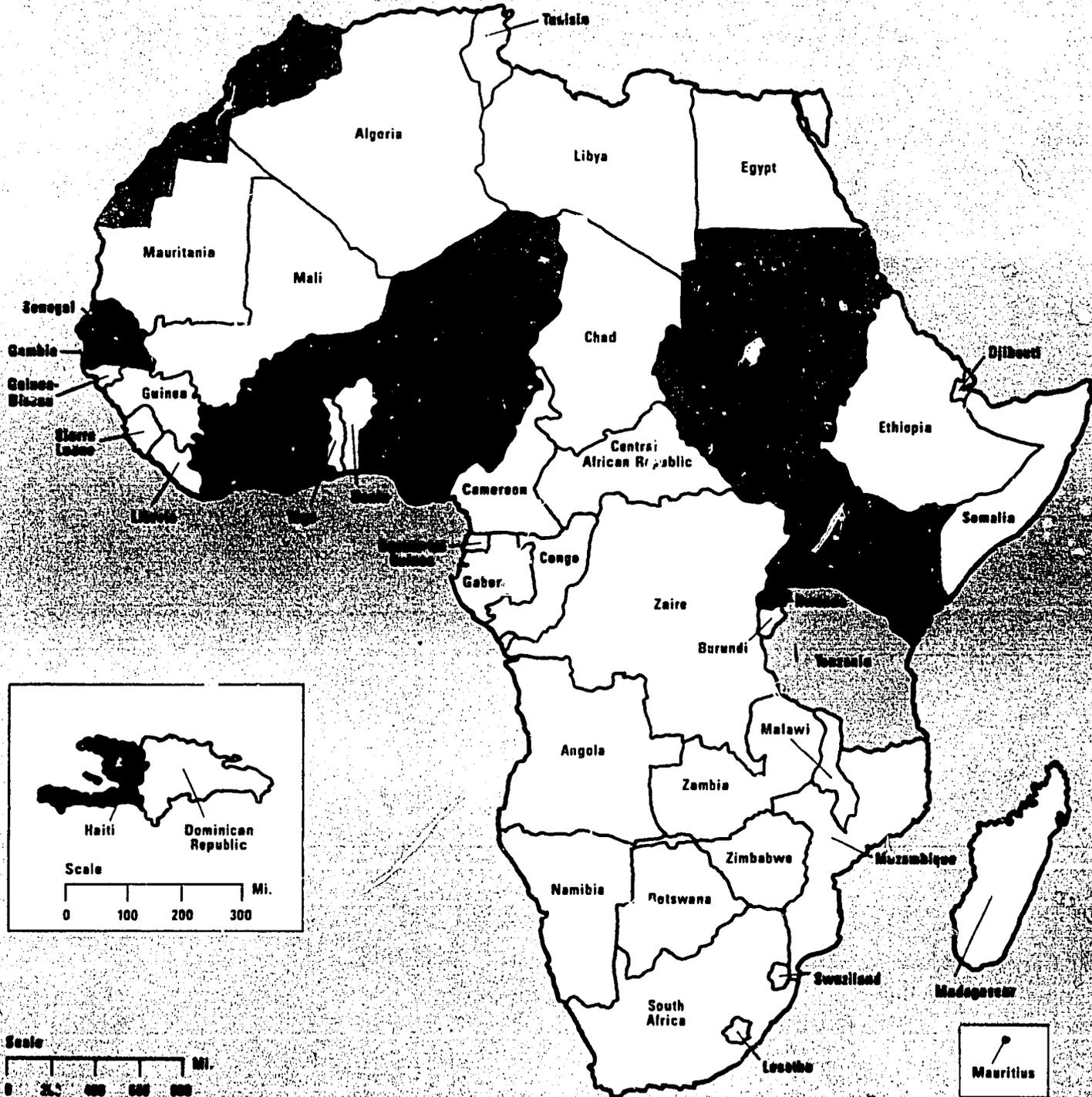


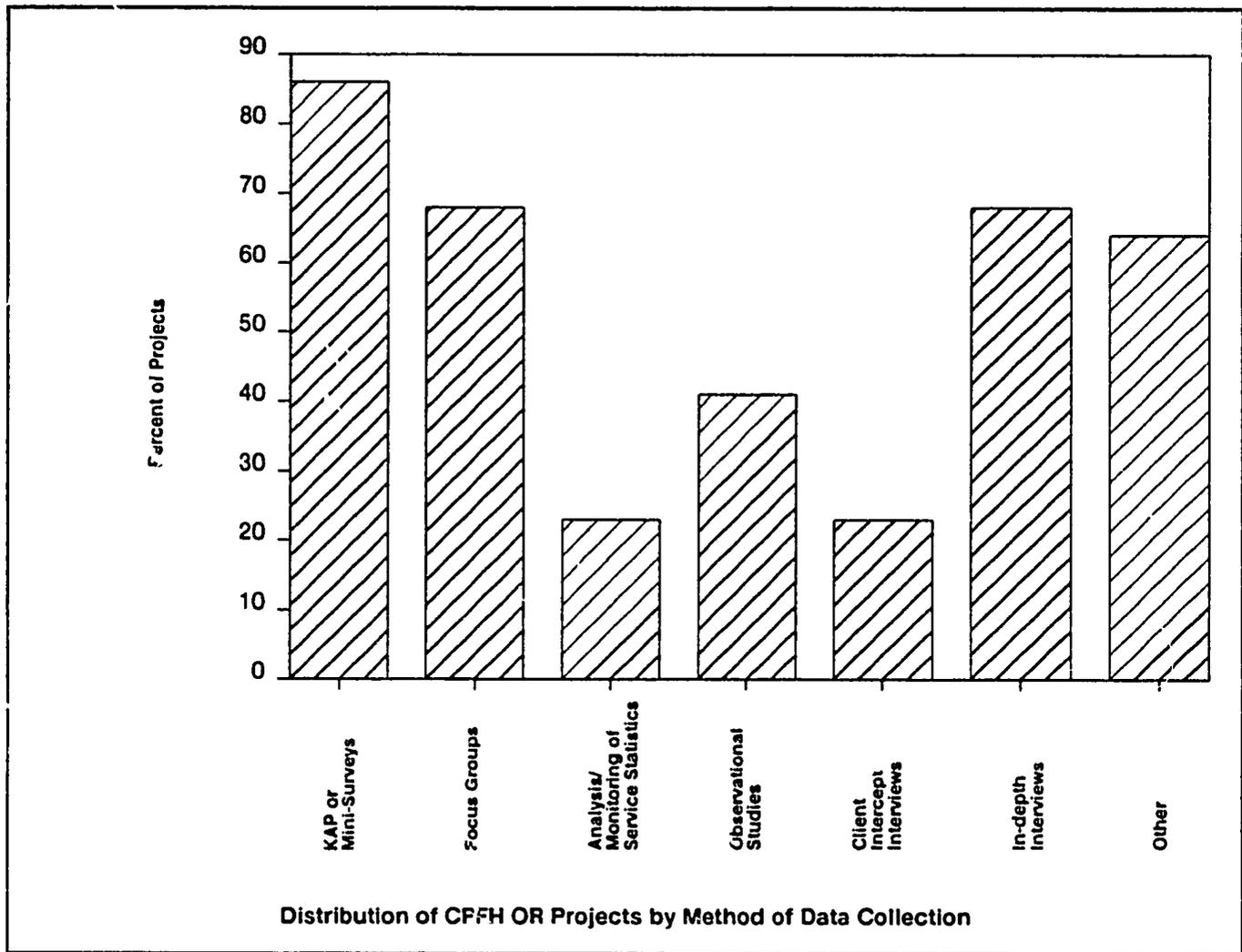
Figure 8

Figure 9

CPFH Operations  
Research (OR)  
Program Involvement  
in Africa and Haiti.

- Countries with current CPFH OR projects.
- Countries with ongoing CPFH OR program technical assistance input.
- Countries with previous CPFH OR projects.
- ★ Countries with CPFH OR permanent technical staff





**Figure 10**

The following descriptions of lessons learned are based predominantly on CPFH's Sub-Saharan experiences. In some cases, Haiti is also discussed, since many of that country's program development experiences mirror those of Africa.

## Assisting Family Planning Policy Development

---

For family planning programs to be implemented and be effective, they must be accepted at the political level. OR has an impact on family planning policy by assisting programs to determine family planning needs and test model programs for contraceptive delivery.

**\*Social Science Research:** In Burkina Faso and Niger, to give two examples, focus groups and family planning KAP surveys have been conducted among men and women. An important result of the research was to provide policymakers with the evidence that substantial proportions of the populations in the capital cities of those countries are aware of modern methods of family planning and far from being against the services, would like to initiate use. Consequently, the Ministries of Health in both countries are considering policy changes that will enhance access to services.

**\*Involving Health Policy Makers:** In Côte d'Ivoire, CPFH has undertaken an OR child spacing/maternal mortality prevention project with the Centre Hospitalier Universitaire de Cocody, one of the most prestigious medical schools in West Africa. One goal of the project is to involve influential faculty members in family planning as a means of preventing high-risk pregnancies and to increase their perception of child spacing as an important health service.

**Figure 11**

Percentage of respondents expressing a desire to use modern family planning methods now or in the future; Women aged 15-49, and males aged 18-60, Niamey, Niger, and Ouagadougou, Burkina Faso.

	Females	Males
Ouagadougou, Burkina Faso % wishing to use (KAP survey, 1986)	88.4%	59.0%
Niamey, Niger % wishing to use (KAP survey, 1987)	78.6%	57.9%

**\*Information Dissemination:** OR projects have been featured prominently at national and international conferences for policy-makers. The international Conference on Community-Based Distribution and Alternative Delivery Systems in Africa, held in Zimbabwe in November 1986, brought together policymakers and program managers from 30 African countries. Of the dozen innovative family planning delivery programs described at the conference, half had been sponsored by AID-funded cooperating agencies which included CPFH, Tulane University, and the Population Council, and had been initiated as OR projects or included important OR components. Conference participants discussed the applicability and policy implications of new delivery systems in their own countries.

## Improving Delivery Systems

The impact of OR is perhaps greater in the development and popularization of innovative delivery systems than in any other sphere. OR projects in Nigeria and Sudan, both initiated in 1980, were among the first to implement community-based distribution of family planning services in Africa. Both programs are still operational and have influenced similar efforts elsewhere. In Sudan, traditional midwives were trained to deliver oral contraceptives and other selected health interventions, and in Nigeria, the rural project used the services of community volunteers to provide a similar set of services in their villages.

Other family planning delivery systems being tested through CPFH OR projects utilize the services of market traders in Nigeria; traditional midwives in Ghana; malaria program volunteers, mobile rally posts, and satisfied contraceptive users (who provide family planning information) in Haiti; local agent distributors in The Gambia; traditional birth attendants and male volunteer health agents in a rural area of Côte d'Ivoire; and rural volunteer development agents in Rwanda whose local name translates as "those who wake up the masses."

Many of these systems have been used in the Asian and Latin American regions. However, they are new for Africa, and as such, they are having a marked effect on perceptions of family planning safety and feasibility in Sub-Saharan countries. Lessons regarding delivery systems learned from OR projects include the following.

**\*Feasibility:** Innovative strategies, even in the absence of effective health systems, are feasible in Africa. However, it is often essential to proceed slowly in their design and implementation. This is necessary not only because systems must be

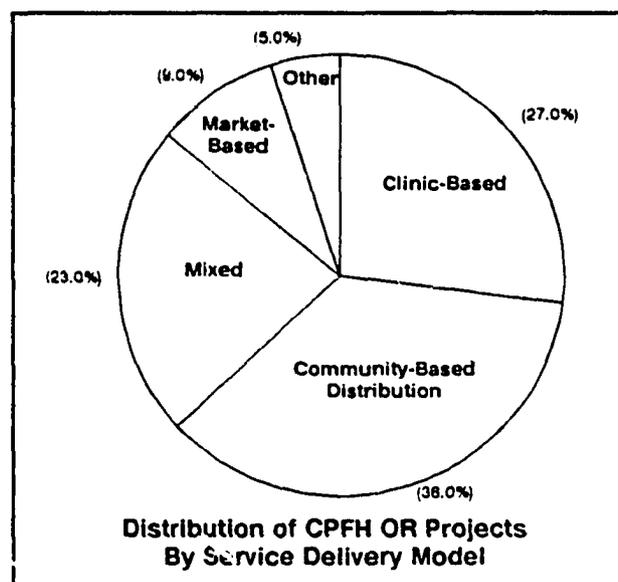


Figure 12

---

developed from the ground up, but also in order to bring political and health policy leaders into the process and ensure its viability.

**\*OR as a Means to Introduce Innovations:** In the early days of family planning policy formulation, it was often politically difficult to initiate service delivery outside the context of small research studies; indeed, many of the nontraditional systems now in place would not have been initiated in Africa were it not for their research aspect. Pilot projects conducted by universities or local research organizations can provide initial field experience without political risk. Ministries have been willing to permit tests of new strategies in well-monitored settings, in order to gain confidence in the strategy's acceptability and feasibility, prior to replication.

**\*Family Planning Delivery Integrated into Existing Health Systems:** Integration of family planning with health services has been essential to its initiation in many Sub-Saharan countries. However, integration can cause problems, including reluctance on the part of conservative health providers to deliver family planning and, because existing health systems are already limited, overburdening of health workers and limited population coverage. OR projects are directly addressing these difficulties.

In Niger and in Burkina Faso, qualitative and quantitative data are being collected in government maternal and child health clinics newly involved in contraceptive delivery. Results suggest clinic efficiency can be improved, increasing the amount of time spent on child spacing services without reducing inputs for other services. As part of an OR project in Niger, focus group information has been used to convince a number of conservative health providers that family planning can be discussed with local women and is an important service that can bring clients to the MCH centers. OR projects can also help to improve coverage by the health system. For example, the project in Uganda is providing assistance, including improved supervision, for outreach activities conducted by existing health workers.

## Building Management Capability

---

More than any other region of the world, Sub-Saharan Africa lacks adequate numbers of trained middle-level managers, program evaluators, and researchers for the health sector in general, and for family planning in particular. Improved capacity to manage service statistics and to organize and analyze other quantitative data can strengthen program management. CPFH has placed computers in nine countries and trained project personnel in their use (see Figure 3). The Center's OR projects have used a number of other strategies to enhance the capability of host organizations to develop and monitor family planning programs.

**\*Technical Assistance:** Experience shows that OR project implementation in Sub-Saharan countries entails lengthy, intensive technical assistance (TA). Multiple visits were required to design and initiate each of CPFH's 22 projects in Africa and Haiti. The OR program has placed full-time resident advisors in almost half the project countries, whereas other countries are served by frequent visits by regional and New York-based staff. This intensive TA is required to develop programs virtually from the ground up, as well as to support the related research. Because OR-related technical assistance covers program planning, implementation, and evaluation, it provides host institution managers with in-depth, systematic experience in these important areas. OR technical assistance thus plays a major role in improving the management capabilities of collaborating agencies.

---

**\*Seminars and Training:** Adequate training and orientation for project personnel are essential in the early stages of family planning project implementation. CPFH has addressed the issue in a number of ways. The Center's Training Program sponsors a month-long management and evaluation workshop each year in New York. Managers or technical staff associated with more than half of CPFH's OR projects have attended these workshops. Similarly, CPFH conducts in-country management/evaluation/research seminars in collaboration with many organizations participating in OR projects.

**\*Establishing Linkages between Service Providers and Local Research Resources:** Given the paucity of research and evaluation expertise in many host countries, creative approaches are needed to link the few existing resources with service delivery personnel. In Sudan and Nigeria, OR projects have been instrumental in forging long-lasting links between local universities and service providers; in Burkina Faso, the project has joined together a local research institute and the Ministry of Health.

## **Increasing Acceptability Of Family Planning For The Individual**

Until recently, social and religious values among African populations were seen as inimical to family planning. Results of fertility surveys repeatedly documented that most couples desired large families. However, because of a number of factors — among them urbanization and recent economic crises in the region — such attitudes are changing. OR projects are studying factors that will enhance positive attitudes toward child spacing and make family planning services more acceptable to individuals.

**\*Tailoring Messages and Programs to Enhance Individual Acceptance:** OR projects collect a mix of quantitative and qualitative data to determine attitudinal barriers to utilization, as well as factors that may enhance family planning motivation. For example, men's and women's comments regarding child spacing, elicited in focus groups in a number of West Africa countries, are being used to prepare appropriate family planning messages for program target groups.

### **Figure 13 Statements Regarding Family Planning Elicited During Focus Groups Conducted in Selected West African Countries, 1986-1987**

#### **WOMEN:**

- "A long space between children helps the mother rest."
- "It is better to use contraceptives than to have too many children whom the father may abandon ... because he feels pressured."
- "It's hard to talk to husbands about family planning."

#### **MEN:**

- "With the economic problems, it's hard for a man to support many children."
- "I'm so worried about finding the money to feed my kids, I don't sleep well at night."

**\*Identifying Practical Barriers to Service Utilization:** Potential family planning users sometimes perceive service delivery sites to be crowded or unpleasant, or believe service delivery personnel to be poorly informed and unsympathetic. OR staff can identify such perceptions and work with the delivery system to improve services, as in projects in Niger and Morocco. Improvements that will be tested include in-service technical and communications training for health personnel, and changes in clinic organization.

## Encouraging The Private Sector

---

Recognizing the coverage problems that plague government services, family planning programs the world over have turned in part to the private sector. For a number of reasons, however, such strategies are less developed in Sub-Saharan Africa than elsewhere. These include the novelty of family planning in the region and the need to first demonstrate the effectiveness and safety of the private-sector approach to policymakers. Also, in francophone countries, formal Ministry of Health approval has traditionally been required for activities undertaken by private-sector groups such as nongovernmental organizations (NGO's), pharmaceutical distributors, and midwives' associations. Given the health system's conservative approach to contraceptive distribution, greater freedom within the private-sector will not be achieved rapidly in francophone countries. However, OR programs are addressing private sector issues where possible.

\*Feasibility and Acceptability: Anglophone African countries have generally permitted a relatively broad range of private-sector family planning efforts. Thus, CPFH private-sector projects have been developed in Ghana, The Gambia, and Nigeria. In the market-based projects in Ibadan and Ilorin, Nigeria, market vendors have been trained to sell oral contraceptives, condoms, spermicides, oral rehydration packets, and antimalarials as part of their regular stock, which can include anything from avocados to zippers. This mode of delivery has been well accepted by the market consumers. Potential political opposition was rapidly defused when OR project staff demonstrated to local leaders that the vendors were well trained and supervised by health personnel.

---

CPFH is also involved with private-sector delivery in Haiti. There, despite national political problems, private-sector groups in semi-urban Cité Soleil and rural Mirebalais have continued to offer family planning and health services, albeit at a lower level than was originally targeted. Remarkably, mobile rally posts and community agents have continued to function and maintain community trust under conditions of political unrest.

\*Replication of the Private-Sector Approach: As more African institutions acquire experience with private sector contraceptive delivery, the approach is expected to spread more rapidly. The original market-based project in Ibadan, Nigeria, was replicated in Ilorin within two years of its initiation. CPFH has received requests for technical assistance and project support to additional private-sector projects in Lagos, in Ghana, and elsewhere in Africa.

## Emphasizing Sustainability And Replication

An important measure of OR project success is whether the model developed and tested can be sustained after initial donor support comes to an end. A second measure is whether it has had sufficient programmatic impact and aroused the necessary political acceptance and interest to be replicated. By these measures, a number of OR projects in Africa and Haiti have been very successful.

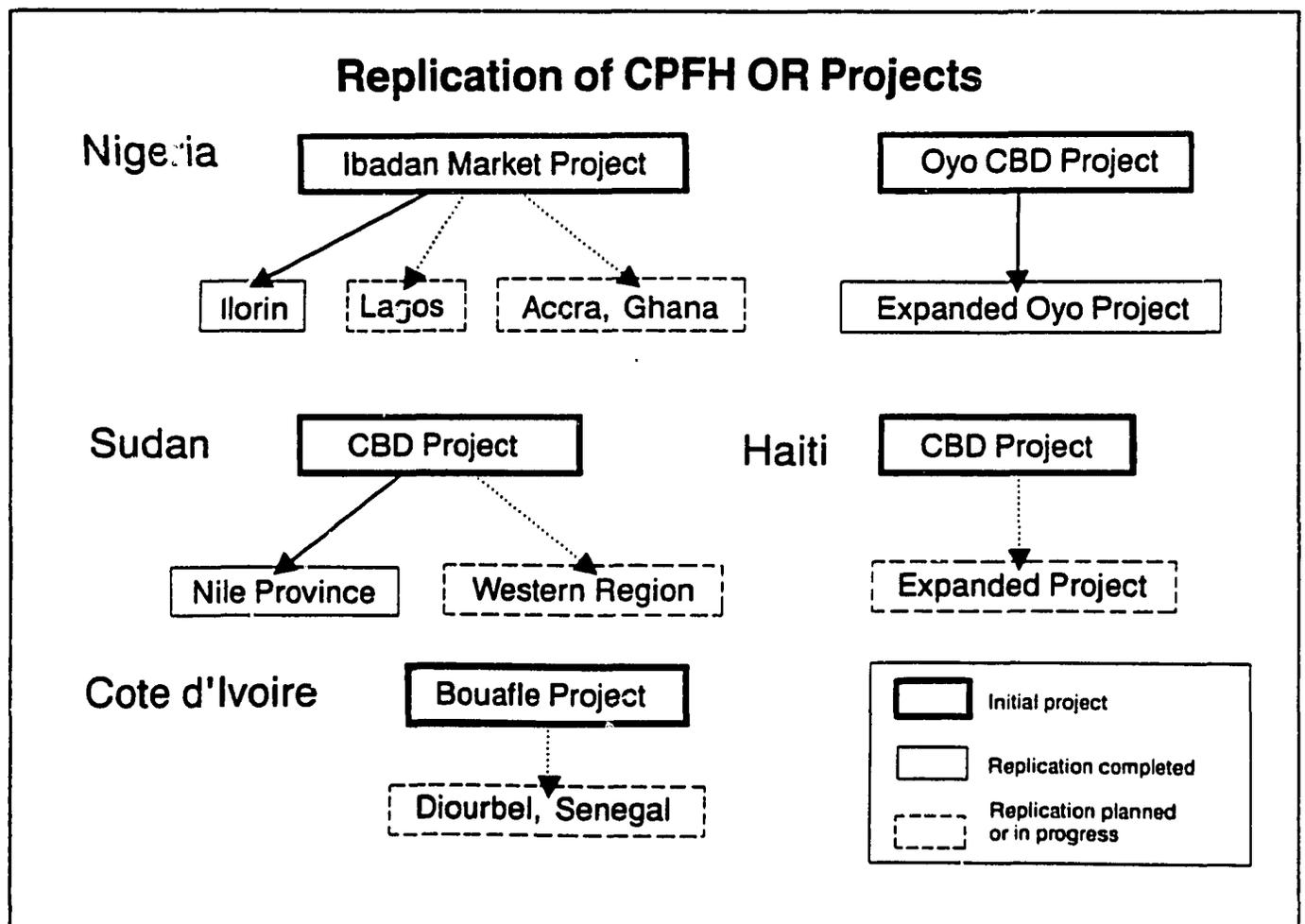


Figure 14

---

**\*Sustainability:** The original Sudan Community-Based Health Project and the Nigerian Oyo State Community-Based Distribution Project (CBD) (both initiated with local universities) were continued by their respective Ministries of Health upon the completion of OR funding. In each case, the project represented the first CBD family planning activity to be integrated into the ministry's regular work plan. Factors that facilitated the transfer from the original university base to government sponsorship included involvement of government planners in the project as early as possible; ongoing use of ministry personnel in supervisory capacities; and development of creative linkages between the projects, the respective ministries, and international donors such that the costs of sustaining the activity were spread among potential funding sources.

**\*Replication:** Project replication entails many of the same steps that are involved in sustaining an existing activity. In addition, the program needs to have had sufficient visibility to arouse interest outside its own project area. Plans have been drawn up to expand the Sudan Community-Based Health Project and the original Haiti Operations Research on Low Cost Delivery of Maternal and Child Health and Family Planning to new regions of their respective countries. Funding in each case will come from a combination of ministry resources and AID bilateral programs. A CBD model initiated in rural Bouaflé, Côte d'Ivoire, will be tested in rural Diourbel, in Senegal. As noted earlier, the Ibadan Market-Based Project in Nigeria is being replicated in the city of Ilorin, and requests to implement a similar model have been received from Lagos and from Ghana.

The earliest OR projects had been in operation for up to five years prior to being replicated. Although the lead time for replication is growing shorter as family planning becomes better established in Africa (the Ibadan project was replicated in Ilorin within two years), a project still needs to be visible and prove its safety and acceptability for a substantial period of time before ministries feel comfortable extending innovative activities.

## Cost Recovery

---

Funding issues have major implications for program sustainability and replication. At this time in Sub-Saharan Africa, the bulk of family planning program funds continue to come from host governments and international donors. The potential for major cost recovery through fees for services and contraceptives or other fund-raising modalities is limited, because family planning programs are fairly new in the region and because even low-cost services represent a substantial proportion of per capita income in Sub-Saharan countries. Furthermore, particularly in francophone Africa, national policies have dictated that health services be provided free of charge. These policies are being reexamined in a number of countries, but for now they inhibit the implementation of many models of cost recovery. Nevertheless, these obstacles do not preclude the need to begin testing cost recovery mechanisms wherever possible.

Several OR projects are assessing management and accounting input required to administer fee collection and revolving funds. Community-based distributors and market vendors in Nigeria, midwives in Ghana, and volunteer distributors in the Gambia are collecting low fees for contraceptives. The Nigerian projects have all implemented revolving fund schemes to recover drug costs.

## Facing The Challenge Of Aids

Programs to prevent acquired immune deficiency syndrome (AIDS) will inevitably influence family planning programs, and vice versa. Family planning provides an important model for sex education and condom delivery, and will thus be watched closely as AIDS prevention programs are developed. Similarly, efforts to prevent HIV infection have major implications for contraceptive delivery and raise a number of questions: Should AIDS prevention be integrated into family planning? What will

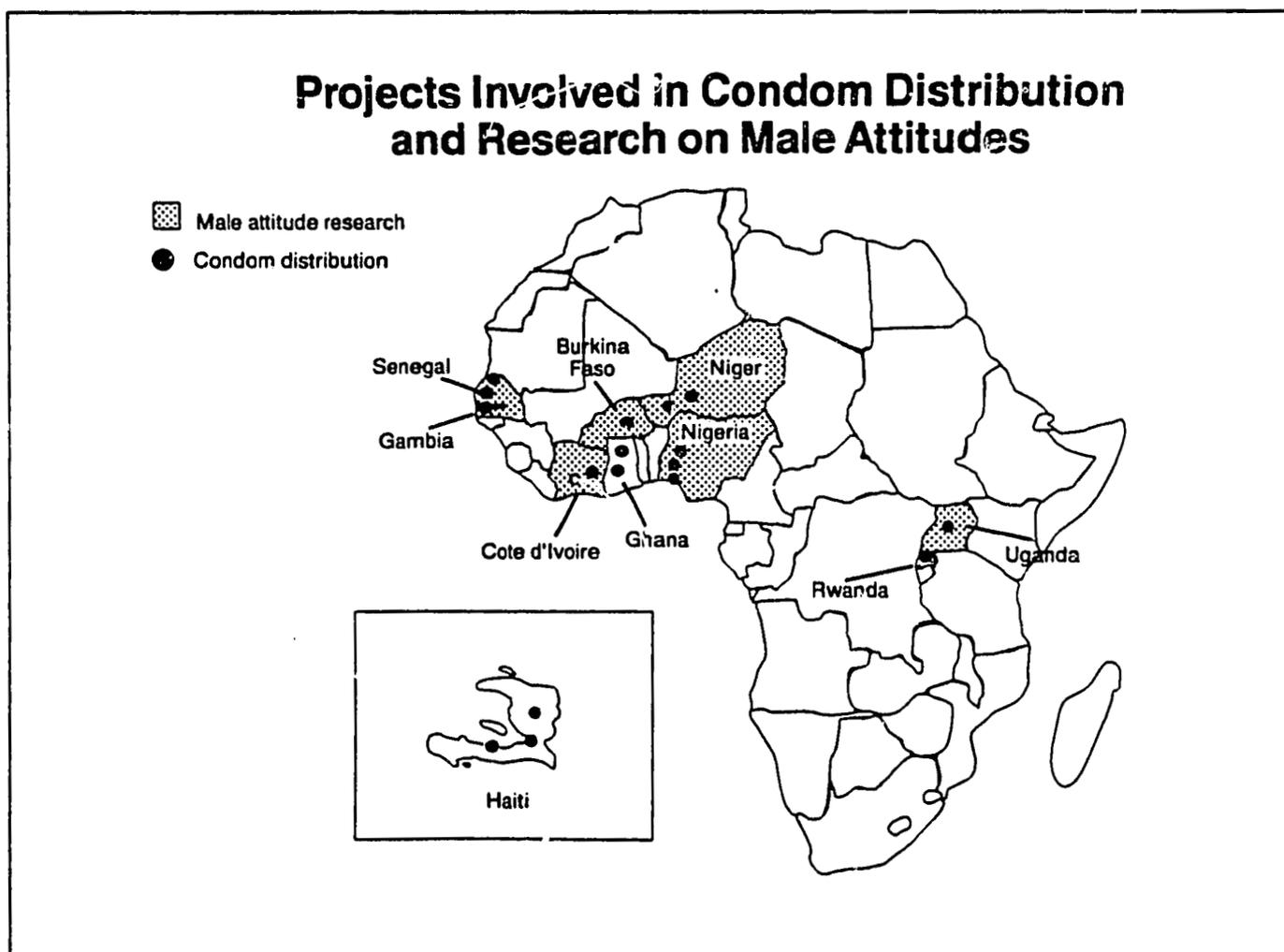


Figure 15

---

be the effect of AIDS on the population's perception of condoms? Should family planning programs in areas of high HIV endemicity routinely offer condoms along with all other forms of contraception, and how should the related information, education, and communications (IEC) be structured? How can we ensure that family planning workers involved in IUD insertion follow appropriate aseptic technique and avoid all risk of spreading the virus through insertion equipment?

CPFH is initiating two projects that incorporate AIDS prevention. In urban Pikine, Senegal, AIDS prevention is being integrated into family planning IEC and delivery, and the effects of this integration on family planning acceptance will be explored. In rural Rakai District, Uganda, a very underserved area thought to have one of the highest HIV prevalence rates in the world, methods of making both family planning and HIV prevention available are being explored. These two projects will provide a contrast in AIDS prevention in rural and urban areas and in regions of low and high prevalence. They also will test message development in English and in French.

CPFH projects will provide information and experiences useful for AIDS prevention program designs in other countries as well. Projects in 11 countries are involved in condom distribution. Twenty projects are collecting data on condom use in the study population, another seven are examining male knowledge of and attitudes toward this and other methods of family planning.

## THE FUTURE

---

To date, the primary goals of family planning OR projects in Africa have been to implement feasible delivery systems and to demonstrate the intrinsic appropriateness of family planning to policymakers. As indicated in this review, these goals are being met.

This essential groundwork paves the way for the next important challenge: increasing contraceptive prevalence rates, particularly within government and private-sector programs that have the potential to reach large population groups. The contraceptive prevalence data gathered in OR projects serve as a baseline for subsequent program evaluation and, in more mature projects, to determine trends. For example, baseline data from urban projects in Burkina Faso and Niger show pre-intervention CPR rates, for modern methods, of 4.4 and 8.2 percent respectively, among women of reproductive age. In a project site in rural Côte D'Ivoire, however, the baseline CPR was found to be below 1 percent. Post-intervention data from minisurvey and service statistics from projects in Nigeria and the Sudan indicate that CPRs have steadily increased and may be approaching 20% in semi-urban and rural project sites in the latter country. The data are encouraging and suggest that much can be accomplished in the next decade.

OR will be called upon to provide vital information regarding the most effective means of moving from pilot or local projects to national programs. Lessons learned at the regional level, particularly with respect to training, supervision and management, will need to be translated to a much larger scale. OR will be used to test modifications in program components arising as a result of the expansion.

A second important challenge will be to increase the financial self-sufficiency of family planning programs. As programs develop, as personnel acquire greater management and research skills, and as demand for services increases, it will be possible to implement projects that look more closely at cost recovery and cost-effectiveness. Financing issues will become more crucial as family planning activities expand to the national level.

---

Finally, the process of encouraging policy change will continue. Experience has shown that good programs frequently influence policy toward greater acceptance of family planning. Operations research will continue to monitor program quality and progress, and to bring relevant information to the attention of policy makers. As family planning programs in Sub-Saharan Africa become better established, OR can be used to test a broader range of service delivery alternatives in each country, and to ensure that the results are considered in policy development.

## APPENDIX I: REFERENCES

---

1. World Bank, World Development Report 1987, Oxford University Press, New York.
2. World Bank, World Development Report 1984, Oxford University Press, New York.
3. W.P. Mauldin, and S.J. Segal, Prevalence of Contraceptive Use in Developing Countries: A Chart Book, Rockefeller Foundation, New York, 1986.
4. Preventing the Tragedy of Maternal Deaths - A Report of the International Safe Motherhood Conference. World Bank, World Health Organization, United Nations Fund for Population Activities, Nairobi, 1987.
5. Population Reference Bureau, World Population Data Sheet, Population Reference Bureau, 1987.
6. N.I. Heckel, Population Laws and Policies in Sub-Saharan Africa: 1975-1985, International Family Planning Perspectives, Vol. 12, No. 4, December 1986.
7. S. Puri, Family Planning on Five Continents, International Planned Parenthood Federation, 1986.

## APPENDIX II: CURRENT CPFH OPERATIONS RESEARCH PROJECTS

---

### Burkina Faso - Family Health

Strengthening Family Health Delivery in Burkina Faso Phase II: Integration of Family Planning into the Public Health Services

### Côte d'Ivoire - Bouafle

Promotion of Community Participation in a Primary Health Care Program in a Rural Area in Côte d'Ivoire

### Côte d'Ivoire - CHU Cocody

Promotion of Family Planning in Côte d'Ivoire Among Women at High Risk of Maternal Mortality

### Gambia - GFPA

Contraceptive Distribution by Commercial Agents: The Gambia Family Planning Association

### Ghana - TBAs

Midwives and Maternities in Ghana: An Operations Research Study of Family Planning in the Private Sector

### Ghana - GRMA

Delivery of Primary Health Care Services by Traditional Birth Attendants in Rural Ghana: An Operations Research Study

### Haiti - AOPS (Mirebalais)

Operations Research Study Using Community Health Workers and Rally Posts for Family Planning Outreach

### Haiti - Cité Soleil

Operations Research to Improve Access to and Continuation of Family Planning through Community-Based Outreach

---

Haiti - SNEM

Operations Research Using SNEM Volunteers

Indonesia - BKKBN

Technical Assistance in Evaluation/Research to the National Family Planning Coordinating Board (BKKBN)

Morocco - Family Health

Operations Research as a Tool for Improving Family Health Services in Three Provinces in Morocco

Niger - Family Health

Family Health Motivation and Referral Project

Niger - Family Health Integration

Integration of Family Health into MCH Centers in Niamey

Nigeria - Ibadan Market

Ibadan Market-Based Distribution Project

Nigeria - Ilorin Market

Ilorin Market-Based Distribution Project

Nigeria - Oyo State CBD

Oyo State Community-Based Distribution Health and Family Planning Project: Phase II

Rwanda - Ruhengeri

Promotion and Delivery of Family Planning Services in Ruhengeri, Rwanda: An Operations Research Study

---

Senegal - Diourbel

Integration of Family Planning into an Ongoing Primary Health Care Program, Diourbel, Phase I

Senegal - PSF Client Records

Patient Records as a Management Tool for Program Planning in the Projet Sante Familiale

Senegal - Pikine Yewi Jaboot

Yewi Jaboot (Choice for the Family)

Sudan - IUD

Paramedic Insertion of Intrauterine Devices in the Sudan

Sudan - Survey

Sudan Community-Based Family Health Final Survey

Uganda - AIDS

Study of the Effect of Health Education on the Transmission of Human Immunodeficiency Virus Infection in the Rakai District of Uganda