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ETHICAL REVIEW COMMITTEE, ICDDR,B.

60

Principal Investigator Michael A. Koenig Trainee Investigator (if any) _____
Application No. 87-016 Supporting Agency (if Non-ICDDR,B) USAID
Title of Study The MCH-FP Extension Project status:
Project Protocol: 1987-92. () New Study
(X) Continuation with change
() No change (do not fill-out rest of form)

Circle the appropriate answer to each of the following (If Not Applicable write NA).

- Source of Population:
- (a) Ill subjects Yes No
- (b) Non-ill subjects Yes No
- (c) Minors or persons under guardianship Yes No
- Does the study involve:
- (a) Physical risks to the subjects Yes No
- (b) Social Risks Yes No
- (c) Psychological risks to subjects Yes No
- (d) Discomfort to subjects Yes No
- (e) Invasion of privacy Yes No
- (f) Disclosure of information damaging to subject or others Yes No
- Does the study involve:
- (a) Use of records, (hospital, medical, death, birth or other) Yes No
- (b) Use of fetal tissue or abortus Yes No
- (c) Use of organs or body fluids Yes No
- Are subjects clearly informed about:
- (a) Nature and purposes of study Yes No
- (b) Procedures to be followed including alternatives used Yes No
- (c) Physical risks Yes No NA
- (d) Sensitive questions Yes No
- (e) Benefits to be derived Yes No
- (f) Right to refuse to participate or to withdraw from study Yes No
- (g) Confidential handling of data Yes No
- (h) Compensation &/or treatment where there are risks or privacy is involved in any particular procedure Yes No

5. Will signed consent form be required:
- (a) From subjects Yes No
- (b) From parent or guardian (if subjects are minors) Yes No
6. Will precautions be taken to protect anonymity of subjects Yes No
7. Check documents being submitted herewith to Committee:
- ☒ Umbrella proposal - Initially submit an overview (all other requirements will be submitted with individual studies).
- ☒ Protocol (Required)
- ☒ Abstract Summary (Required)
- ☒ Statement given or read to subjects on nature of study, risks, types of questions to be asked, and right to refuse to participate or withdraw (Required)
- ☒ Informed consent form for subjects
- ☒ Informed consent form for parent or guardian
- ☒ Procedure for maintaining confidentiality
- ☒ Questionnaire or interview schedule *
- * If the final instrument is not completed prior to review, the following information should be included in the abstract summary.
1. A description of the areas to be covered in the questionnaire or interview which could be considered either sensitive or which would constitute an invasion of privacy.
 2. Examples of the type of specific questions to be asked in the sensitive areas.
 3. An indication as to when the questionnaire will be presented to the Cttee. for review.

(PTO)

I agree to obtain approval of the Ethical Review Committee for any changes involving the rights and welfare of subjects before making such change.

Michael A. Koenig 6/19/87
Principal Investigator

JUN 23 1987

Trainee

19 June 1987

SECTION I - RESEARCH PROTOCOL

1. Title: The MCH-FP Extension Project Protocol:
1987-92.

2. Principal Investigator: Michael A. Koenig

Co-Investigators:

Operations Research: Yusuf Hasan, Ali Ashraf, H. Banu
Intervention Activities: Mafizur Rahman, Fazlur Rahman
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Consultants:

Vincent Fauveau (or his substitute from the CMD)
Bogdan Wojtyniak (or his substitute from the DSS)

3. Starting Date: October 1, 1987.

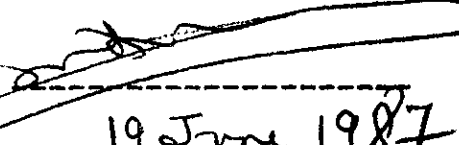
4. Completion Date: September 30, 1992.

5. Total Direct Cost
(All Externally Funded): \$1,273,895 (Cost for 1st. year)

6. Scientific Programme Head: Dr. Badrud Duza

This protocol has been approved by the Population Sciences and Extension Division.

Signature*

Associate Director: 

Date:

19 June 1987

7. Abstract Summary:

In 1982, the MCH-FP Extension Project was established to carry out policy relevant research on the Matlab Family Planning and Health Services Project, and to test the transferrability of successful elements of the Matlab program into the public sector service program. This test was a collaborative undertaking between the Ministry of Health and Family Planning (MOHFP) of the Government of Bangladesh and the ICDDR,B in two rural field sites in Sirajgonj and Jessore. The current protocol represents a proposal essentially for the continuation of activities begun during the initial project period as well as selective expansion of activities aimed at contributing to further improvements in the MOHFP health and family planning service delivery program, in conjunction with the Government.

During the initial Project period, major strides were made in a number of areas of health and family planning service delivery, many of which have been subsequently translated into national policy. For many of the activities initiated during this period, however, there has been insufficient time to conclusively evaluate their overall effects. While the issue of transferrability of the Matlab program will continue to be an important objective in the current proposal, the focus of the Project will be expanded to include the broader testing and evaluation of promising service delivery strategies within the limited areas of the Project field sites, prior to nationwide implementation.

The activities of this protocol fall within the Centre's priorities of addressing the issue of diarrhoeal disease and the related issue of fertility, with a specific focus upon operational research to improve the service delivery program in these areas. The current proposal represents an umbrella protocol for the coming five year period. The specific details of activities will be worked out within the framework of the Population Sciences and Extension Division.

8. Reviews: (Leave Blank)

(i) Ethical Review Committee: -----
(Approved/Not Approved)

(ii) Research Review Committee: -----
(Approved/Not Approved)

(iii) Director's signature & remark, if any.

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SECTION II- RESEARCH PLAN

A. INTRODUCTION

A.1. Objectives

The problem of effective health and family planning programs is of crucial importance in the context of rural Bangladesh and comparable situations elsewhere in the Third World. Of pivotal policy significance is the question of whether well-designed programs can succeed under conditions of extensive socioeconomic under-development. The MCH-FP Extension Project has evolved against this general backdrop and pertinent priorities of the ICDDR,B with respect to public health, nutrition, and fertility. This umbrella protocol is a proposal essentially for continuation of operations research and activities of the Project during the current phase (1982-87), with a few additions noted in the document for the forthcoming phase (1987-92).

A collaborative effort between the ICDDR,B and the Government of Bangladesh (GOB), the Project is located in the Population Science and Extension Division of the Centre. Administered by Dr. M. Koenig, Project Director, under the supervision of Dr. M. Badrud Duza, Associate Director of the Division, the Extension Project was launched in 1982 in two rural areas of the country. The purpose was to examine the transferrability of successful elements of special experimental programs-- evidenced in Matlab-- to the service program at the national level. As stated in the original protocol (No. 82-036) the primary objective was:

"...to test the capacity of the GOB health services system to absorb innovations that have been successfully tested in special projects. This objective is to be pursued on the premise that innovations can be instituted in the GOB system without major structural change." (Phillips, et al. 1982, p.1)

A subsidiary objective was to conduct operational research on the barriers to effective service delivery within the government program and on the problems and obstacles to successfully transferring innovations from the Matlab program.

During the coming period (1987-92), the Extension Project will continue to address the above objectives concerning the transferrability of selected elements of the Matlab program to the Government system. In addition, working in conjunction with the Government, the Project will pilot test and explore the prospect of new policy initiatives in the fields of MCH and family planning, and assess the potential for their dissemination to the national program.

A.2. Background

A.2.1. The Matlab Family Planning Health Services Program

In October of 1977, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) launched an experimental family planning and maternal and child health project in Matlab, Bangladesh. The original objective of this project was to test the hypothesis that an appropriately-designed service delivery program could induce and sustain fertility decline in unfavorable settings such as rural Bangladesh. This innovative project, termed the Matlab Family Planning Health Services Project (FPHSP), was developed from lessons learned from an earlier, less successful attempt to deliver family planning services in the Matlab study area (Stinson, et al. 1982). One well-documented result of this program has been an impressive rise in contraception, with current rates exceeding 45 percent, and a corresponding decline in fertility (Bhatia, et al., 1980; Phillips, et al. 1982; Phillips, et al., 1985). There is also evidence to suggest that the project has achieved smaller but significant reductions in infant, child, and maternal mortality as well (Chen, et al., 1983; Phillips, et al. 1987; Koenig, et al. 1987). The experience of Matlab has demonstrated that with an appropriate service delivery program, high and sustained levels of contraceptive use can be attained in a setting where low levels of socioeconomic development have led many observers to conclude that such results are not possible. Equally significantly, prior to the success of the Matlab program, it was possible to attribute the much more modest accomplishments of the government service program largely to inadequate demand for services such as family planning. The Matlab experience raised the question of whether the absence of similar success in the government program could not be wholly or largely attributable to a weak and unresponsive service delivery system. Moreover, it raised the question of whether improvements in the government service program could be achieved by attempting to replicate selected elements of Matlab into the government program.

A.2.2. The MCH-FP Extension Project

The Extension Project operates in two rural field sites: in Abhoynagar Upazila in Jessore District located in the southwest part of Bangladesh, and in Sirajgonj Sadar Upazila in Sirajgonj District in the north central part of the country (see maps in Appendix A). It may be noted that as a condition for approval of continued funding to the Matlab service program, the Government of Bangladesh made its concurrence conditional upon the establishment of a project by ICDDR,B to replicate the success of the Matlab program within the Government program in other areas of Bangladesh. A baseline survey was undertaken in these two areas in 1982; this survey was subsequently followed by routine quarterly collection of demographic and service program data (see discussion of the Sample Registration System). A

concomitant activity was the conduction of a series of operational studies aimed at identifying major obstacles to effective service delivery within the Government program. Based upon this research, the introduction of new service interventions was initiated in 1983, and has since continued in a carefully phased manner.

It was recognized from the onset that small pilot projects in general, and the Matlab project in particular, differ significantly from large scale public sector programs such as the Bangladesh health and family planning program. Pilot projects such as Matlab are usually fielded with special resources and are thus not subject to resource constraints generally experienced in public sector programs (Havelock, 1969). As in the case of Matlab, they are often fielded by small, independent agencies outside of the larger and usually less flexible public bureaucracy (Rubin, et al. 1974). They are often set up, in terms of organization and objectives, with only little concern for issues such as relevance and replicability for broader programmatic policy (Van de Vall and Bolas, 1980). These differences served to severely limit utilization of research findings from this pilot project for formulating national program policy.

A number of features distinguish the Extension Project from the special pilot projects such as the Matlab program:

- 1) The project was deliberately constrained to use existing Government staff, resources, and policies. The principle objective was to ensure that approaches developed in the project would be tested under conditions which closely approximate the typical government service program, and therefore would be replicable on a wider scale if promising.

- 2) All services and management are provided by usual government staff. ICDDR,B staff assist in the coordination of activities and in training programs, but overall responsibility for field activities remain in the hands of government officials, reinforcing the idea that the project is government-owned and operated.

- 3) Project areas were initially selected by the Government, in areas with no special history of prior research or service programs. (See Phillips, et al. 1984 for a more extensive description of the design of the Extension Project).

The Extension Project consists of two primary components:

- 1) An intervention component in which ICDDR,B staff work jointly with government colleagues in attempting to improve the service delivery program through the transfer of elements of, and knowledge and experience from, the Matlab project to the government program.

2) An operations research component which examines the existing service program through a number of complementary sources of data, with a primary focus upon identifying important constraints to effective service delivery, assesses the effects of interventions introduced upon service operations and their impact upon program effectiveness.

Activities carried out under each component are briefly described below, the operations research component is detailed under section A.2.2.a. and the intervention component is described in section A.2.2.b.

A.2.2.a. Operations Research Component

A number of complementary approaches have been employed to research the government service program and to evaluate the impact of project interventions. The project has maintained an experimental design which includes both treatment and comparison areas, permitting the assessment of overall project impact. In addition, longitudinal data on service operations and demographic events have been routinely collected from a representative sample of households in the project areas. Finally, the project has employed a variety of qualitative data collection approaches to examine the government health and family planning service program and changes in it as a result of project interventions. (see Methods and Procedures section).

During the initial project period, these research approaches have yielded considerable insight into the government service delivery program at the field level, and the ways in which this system differs in nature and content from the Matlab program. These differences are outlined in Table 1 (see Appendix B for a more detailed discussion of major differences):

Table 1: Observed Doorstep MCH/FP Services - Matlab Project and MOHFP Program

	Family Planning	Antenatal Care	Post-Natal Care	Mother Care	Child Care
MATLAB PROJECT	Pills	Screening and Monitoring If all Pregnant Women	Postpartum Contraceptive Counselling	Aspirin	ORS
	Condoms		Nutrition Education		Deworming Medicine
	Foam	High Risk Pregnancy Screening and Monitoring	Breast Feeding Problems (FNW)		Scabies Medicine
	Injectables				Vitamin A & D
	IUDs	Tetanus Toxoid Immunization	Delivery Complications Follow-up (FNW)		Skin Ointment
	Contraceptive Follow-up and Continuous Care	Iron Tablets			Vaccination (Measles)
	Referral of Complicated Cases (FNW)	Nutrition			
		Safe Delivery Kits			
MOHFP PROGRAM	Pills				ORS
	Condoms				Vitamin A
	Foam				EPI

Source: Koblinsky, et al. 1984

Note: High risk screening and monitoring and advice on breastfeeding problems are not direct services but are important aspects of the program.

As outlined in Table 2, operations research in the Extension Project areas and comparisons with the Matlab program identified a series of constraints--at both the field worker and field supervisory levels--to the effective implementation of the government service program. Findings from these operational studies formed the basis for the design of the intervention strategy of the Extension Project.

Table 2: Barriers to Implementation - MOHFP Field Program

FIELD WORKER LEVEL	FIELD SUPERVISION LEVEL
1. Low worker density	1. Absence of planning and problem solving strategies
2. Narrow focus on sterilization	2. Role ambiguities and lack of authority
3. Infrequent client contact	3. Supervisory styles and activities focused on inspection and adherence to bureaucratic procedures than on guidance, support and performance oriented controls
4. Poor rapport	4. Lack of coordination amongst officials as well as between officials and workers
5. Lack of medical supplies, medical back-up and technical supervision	5. Record-keeping system not utilized for managerial purpose
6. Ritualistic record-keeping	6. Low field presence of supervisors
7. Lack of training	
8. Inadequate field supervision	

Source: Koblinsky, et al. 1984

A.2.2.b. Intervention Component

The primary objective of intervention activities is to introduce and sustain organizational change leading to improvements in the health and family planning service delivery system. Toward this end, the role of ICDDR,B staff have been largely that of catalysts or 'change agents', working collaboratively with government staff at all levels of the program from the upazila downward. Through a well-defined system of joint decision-making and direct counterpart support, the intervention attempts to work within the existing system to transfer successful components of the Matlab service system into

the government program. As outlined in Table 3, the Extension Project has focused upon transferring a number of components of the Matlab system-- encompassing technical, training, and supervision and field management interventions-- to the Government service program.

Given the overriding objective of the Extension Project to improve the national health and family planning service system, corollary efforts have been undertaken to translate operations research findings from the two Project field sites into broader national policies. The Extension Project has accomplished this by feeding back important findings from the Project to national policy makers. This feedback system has often been informal in nature, consisting of joint visits to Project field sites with government officials to view the program, informal meetings, and the preparation of briefing papers or sessions to outline major project findings. When appropriate, the Project has also established formal linkages with government implementing units, as in the case of working directly with NIPORT to develop and revise the national curriculum and training program for FWAs and currently with the Family Planning Directorate to assist in the nationwide recruitment and training of FWAs.

Table 3: Service and Operational Components of the Matlab Service System and Mode of Transfer to the Ministry System

Matlab System	Mode of Transfer
<u>Service</u>	
1 Comprehensive family planning services in the home: pills, Depo-Provera, Copper T IUD, condoms	1 Assist with implementation of team approach to fieldwork. Initial focus of door-to-door visits on pills, condoms, and injectables.
2 Subcentre Copper T services with comprehensive MCH, contraceptive, and referral services.	2 Assist in establishment of FWCs. Retrain FWVs in MCH care and Copper T insertion. Develop the referral information system.
3 Follow-up for both MCH and FP services.	3 Devise a plan and implement follow-up of all women and visitation methods.
4 Comprehensive immunization services, village-based ORT, antenatal care, nutrition advice.	4 Assist in developing cold chain procedures. Train staff in MCH care, ORT, and EPI.
<u>Operational</u>	
1 Primary care by CHW posted at a ratio of 1:1,000 population. High proportion of female workers.	1 Foster better use of female workers. Develop teams of male and female workers.
2 Decentralization to the union level: a One male supervisor with all administrative authority. b Simple-to-use MIS with no computer necessary. c Fortnightly meetings of all union-level workers. d Task goal setting, activities planning.	2 Foster FWC development to include: a Clear lines of supervision. b Train workers in a simple adaptation of the Matlab MIS. c Arrange monthly meetings of union-level workers in the FWC. d Demonstrate goal setting.
3 Special logistics: speedboats for supervisors, country boats for village workers.	3 No special logistics.
4 Continuous training: Phased-in introduction of new MCH activities; continuous refresher training.	4 Four-week training course, with counterpart support continuing three months beyond formal training
5 Government pay scales for village staff; higher salaries for supervisory staff.	5 No change in salary structure.
6 Clear delineation of roles: a Technical (medical supervision) by physician over FWV and FWV over CHW. b Administrative (task supervision) by paramedic supervisor over male assistant supervisor (union level).	6 Clarify roles in the course of meetings (no change in administrative structure).

Note: FWC = family welfare center; MIS = management information system; FWV = female welfare visitor; CHW = community health worker; UHC = upazila health complex; ORT = oral rehydration therapy; EPI = expanded program for immunization

A.3. Rationale

During the initial project period 1982-87, considerable progress was made within the Project areas in improving the health and family planning service delivery program. Notable areas of improvement include:

- Identification of key elements of the Matlab service program-- for example, in the areas of training, staffing, logistics, and supervision-- and the phased implementation of these elements within the MOHFP program in the Extension Areas.
- An increase in contraceptive prevalence in the Project's field sites in Sirajgonj and Abhoynagar, with contraceptive use rising from 21 percent in Abhoynagar to its current level of 33 percent, and from 8 percent to a current level of 16 percent in Sirajgonj. Considerably greater gains were achieved in areas where FWAs received intensive on-the-job training through counterpart support from Matlab female fieldworkers.
- Marked improvement in the frequency and regularity of household visitation. This is in large part due to improved supervision and record keeping system. According to the most recent data collected by the Project's independent service statistics, 61 percent of eligible women in Abhoynagar reported having received at least one visit by a female worker in the preceding three month period compared to only 36 percent in the neighboring comparison area; the corresponding figures in the Sirajgonj treatment and comparison areas were 53 and 18 percent, respectively.
- Increased emphasis by fieldworkers upon expanded contraceptive choice. Data from the Project suggest that its interventions have led to a shift in emphasis by FWAs away from primary reliance upon permanent methods such as sterilization toward a range of reversible methods, according to the needs and characteristics of individual users.
- Improvements in the quality of care in the MOHFP program, through the establishment of interventions such as satellite clinics, improved care by FWAs at the H&FWC, contraceptive screening checklists, and improved supplies and logistics, and improved training and staffing ratios of female fieldworkers.
- Development of a cost-effective rapid feedback system for monitoring demographic impact and service operations, and to evaluate project impact.

A number of operational findings from the Project have, in turn, have been incorporated into national health and population policy in Bangladesh's Third Five Year Plan:

- The decision to increase the density of female fieldworkers through the recruitment of 10,000 additional FWAs during the Third Five Year Plan
- The decision to supply and staff community-donated union-level clinics (H&FWCs) until such time that official government centers have been constructed.
- The decision to introduce a recordkeeping system for female fieldworkers in the program.
- The revision of the basic training curriculum for FWAs with a more practically-based field orientation.

Thus, while significant progress has been made in improving the service delivery program within the Extension Areas, the continuing gap in results between the Matlab and Extension programs suggests the potential for further improvements within the MOHFP service program. During the coming period, Extension Project activities will related to:

1) Continued exploration of the process of transferring aspects of Matlab to the MOHFP service program

The process of testing and evaluating the feasibility of promising innovations from the Matlab program within the setting of the government program is at present incomplete-- for example, in the testing and evaluation of the effect of an increased density of female fieldworkers upon service performance, and in the evaluation of the feasibility of a domiciliary injectible contraceptive program, in response to requests by the Government of Bangladesh.

2) Continued operational research on the constraints to effective service delivery within the MOHFP system, identification of areas where the Matlab model is not applicable, and the formulation of appropriate new service strategies

In the coming period, the focus of the project will be expanded to include responding to Government requests to pilot test and evaluate policy directives within the limited but realistic setting of the Extension Areas, prior to nationwide introduction. During this coming period, the Project will also continue to address a broad research agenda focussing upon the policy and programmatic lessons and implications of the Matlab and MOHFP service delivery programs.

Thus, there is strong justification for a continuation of Extension Project research and intervention activities during the

coming four year period. As noted in the recent External Review of the Population Science and Extension and Community Medicine Divisions:

"The Extension Project should be continued by ICDDR,B, not only for the new findings yet to emerge but also to keep alive these extremely important results for their further absorption by the field. Jessore and Sirajganj are a nearly unique trial calculated specifically to explore transfer issues, and the results should be communicated energetically as a Centre contribution."

(Ross and Ghosh, 1986, pp.5-6)

B. SPECIFIC AIMS

The Project will pursue a number of specific aims in two broad areas: 1) operations research on service interventions introduced in the Extension Project areas (spelled out under Section B.1. below), and 2) studies on program performance within the MOHFP system (shown in Section B.2.). Further details of the general outline of research and intervention activities, as proposed in this umbrella protocol, will be worked out within the guidelines of the Population Science and Extension Division of the Centre.

B.1. Operations Research on Service Interventions

a) To continue to test and evaluate successful elements of the Matlab service program within the government public sector program.

b) To evaluate the impact of the increase in the density of female fieldworkers within the Extension Areas upon improved service delivery performance and contraceptive acceptance.

c) To test and evaluate promising service delivery interventions, as requested by the Government or suggested by Project research, in the Extension Areas prior to nationwide implementation.

Operations research on intervention activities in the Extension Project fall under four main headings: 1) Human resource development, 2) Technical interventions, 3) Improved field management and supervision and 4) National level activities. In the following discussion, Project activities during the coming period in each of these areas--both ongoing as well as new activities-- are briefly described and outlined.

B.1.1. Human Resource Development

Continuing Activities

Training of MOHFP Field Staff: An important intervention of the Extension Project early in its existence was the undertaking of basic training of all MOHFP field-level staff in conjunction with upazila-level officials. This training consisted in part of a one-month training program to all fieldstaff, and in part of one-on-one field-level training through counterpart support by ICDDR,B staff to selected MOHFP staff. This basic training program has been largely completed and experience with this process played a central role in the revision of the FWA basic curriculum and training program, which has been adopted largely intact by the National Institute of Population Research and Training (NIPORT) for training of FWAs during the Third Five Year Plan (see subsequent discussion). Future training efforts are likely to concentrate upon regular refresher training and upon the introduction of new interventions.

Increased FWA Density Experiment: In 1986, the Extension Project was requested to pilot test the increased FWA density experiment, whereby worker to population ratios would be improved from the current levels of roughly 1:7500 to 1:4000, prior to the addition of 10,000 additional FWAs nationwide. This effort has consisted of the recruitment of additional FWAs in the two Project field sites as well as in parts of two new upazilas in Jessore where the ICDDR,B has set up a monitoring system but does not work collaboratively with the government (see Appendix A).

A central activity of the Project during calendar year 1986 has been the undertaking of advertisement, recruitment, training, and placement of FWAs in the Extension areas. Findings on the problems which the Government is likely to experience during nationwide recruitment, as well as recommendations concerning how this process can be optimally carried out, have been effectively communicated to GOB in a wide variety of forums. Current efforts in the Extension Project field sites are concentrating upon the assessment of the impact of this improved service delivery performance through quantitative as well as qualitative methods of evaluation.

A current focus of the Extension Project, and one which will continue during the coming period, is the field implementation and evaluation of the increased FWA density experiment within the Project field sites. The Extension Project has worked in close collaboration with MOHFP officials in planning the recruitment and training of additional FWAs in the Project areas, to increase staffing ratios to 1: 4000 population, with the overall objective of improving the coverage as well as the quality of family planning and MCH services. This effort has consisted of the creation and recruitment of 38 additional FWA posts, carried out in the two Project field sites as well as in two new upazilas in Jessore where ICDDR,B is not working collaboratively with the

government. The latter has the objective of ascertaining the potential improvements in the national service program resulting from this staffing change under truly 'natural conditions'.

This effort to date has included delineation of population-based work areas, development of effective FWA recruitment procedures including field verification, revised FWA training curriculum and training procedures, development of an improved record keeping system, integration of existing and new FWAs into new work routines, and the selected provision of counterpart support to provide on-the-job training in the field. In both areas, these efforts are in various stages of completion. Within these upazilas, a primary scope of activity during the subsequent 18 month period will be evaluation of this increased worker density in terms of its impact upon worker performance, coverage, and quality of service delivery, as well as its implications for the expansion of the range of services offered by the FWA.

New Activities

Volunteer Workers: A finding from the Extension Project is that in many parts of rural Bangladesh, a significant number of FWA posts are likely to remain unfilled, primarily owing to the dearth of female candidates with a 10th standard education. Given the cultural barriers restricting the movement of women, this means that many women and children in rural Bangladesh would not receive MCH or family planning services. This is likely to be particularly evident in areas which are already characterized by low family planning performance. An intervention proposed for the coming Project period will be a test of the feasibility of increasing coverage through the addition of voluntary (i.e., non-governmental) part-time female workers.

During the coming period, the Extension Project would therefore propose to test and evaluate the feasibility of increasing health and family planning coverage through the hiring of voluntary workers. If successful, this intervention may provide a mechanism for future additional improvements in worker-to-population ratios and increasing the frequency of household visitation within the MOHFP program. Although the concept of volunteer workers has not been previously tested or implemented in Matlab, the Matlab experience has demonstrated that women with an 8th standard education can effectively deliver MCH and family planning services in rural Bangladesh.

B.1.2. Technical Interventions

Continuing Activities

Improved Quality of Care: During the subsequent project period, efforts to improve the quality of care in the MOHFP system will be continued and expanded. The Extension Project has already been

engaged in activities in this area as reflected in interventions design to improve the flow of supplies and logistics to the field, to improve the quality of MCH and family planning care by the FWV at the union subcentre, to establish functioning, community-donated H&FWCs and satellite clinics, and to develop and test screening checklists to identify women who have contra-indications for specific methods. During the coming period, the Project will also intensify efforts to develop linkages between the FWA and the FWC at the union health centre since this linkage is essential for the provision of most MCH services and the treatment of contraceptive side effects, and to further expand training efforts aimed at improving the quality of services provided by both paramedical staff at the H&FWC and fieldworkers.

Domiciliary Injectable Contraception Program: In recognition of the fact that much of the success of the Matlab service program was linked to the household provision of injectable contraception, the Extension Project was requested by the government to pilot test the feasibility of a household-based program delivered by FWAs; at present injectables are only clinic-based and provided by FWVs. Efforts are currently ongoing to evaluate the efficacy of this program, particularly in light of the recent increase in FWA-to-population ratios, and will continue during the coming project period.

Unconstructed Health and Family Welfare Centres (H&FWCs): Government plans call for the construction of an H&FWC in every union of Bangladesh. However, work on this goal is proceeding slowly, and at present there are fewer than 1500 GOB-designated 'functioning' H&FWCs. The experience from Matlab demonstrated that it was possible to request the community to donate space for the paramedical staff to provide services, and that such community-donated structures could effectively provide MCH and family planning services. The experience in the Extension areas also demonstrated that these 'unconstructed' facilities could serve as highly adequate interim arrangements until such time that new structures could be built, and thus that services need not await construction. This has led to a revision of this policy during the Third Five Year Plan. Efforts during the coming period will largely consist of expanding the quality and range of services provided by these unconstructed clinics.

Expanded Program in Immunization (EPI): The Extension Project has experimented on a small scale with several alternative approaches to immunization. Although the Project must operate within the current national program, to the fullest extent possible, there will be continued experimentation emphasizing a more intensive campaign-oriented delivery approach by male health assistants.

ORS Distribution: The Extension Project has introduced several interventions aimed at improving the regularity and coverage of field distribution of ORS in the government system. While some progress has been achieved in improving this service component, considerable scope remains for further improvements. During the

coming period, efforts will continue to modify both local and national-level policies to improve the distribution system of ORS.

Satellite Clinics: A consistent finding to emerge from the Matlab experience has been primary importance of decentralizing MCH and family planning services to the maximum extent possible. In the government system, orders to further decentralize paramedical services-- through the establishment of satellite clinics attended by the FWV-- have been sent out, but never effectively implemented. In the Extension Areas, operational barriers to implementing this order were identified and rectified-- with the absence of transportation allowances or facilities representing a primary obstacle to the effective functioning of these facilities. The satellite clinics have proved to be largely self-sustaining as well as effective vehicles efforts the delivery of basic MCH services and home-based IUD insertion. During the coming period, efforts in this area will focus on expanding the range and quality of MCH and family planning services offered through satellite clinics.

New Activities

Drug Mini-kits for FWAs: The experience of Matlab has demonstrated the importance of the worker's ability to treat perceived or actual contraceptive side effects as well as minor maternal and child illnesses during the course of her regular rounds of household visitation; in order to reduce contraceptive discontinuation and increase her credibility among village women. In the current MOHFP system, the FWA is largely restricted to carrying only contraceptive supplies. An intervention which will be tested during the coming period will be whether the addition of several basic medicines to the FWA's kit for the treatment of common illnesses--scabies medicine, aspirin, ORS, and folic/iron tablets--would, if properly delivered, increase her credibility and effectiveness as a worker. An intervention is therefore presently being formulated to provide mini-kits to FWAs for the treatment of contraceptive side effects and common childhood infections.

B.1.3. Strengthening Field Management and Supervision

Continuing Activities

Recordkeeping: A simple hand-held register system has been developed in Matlab which maintains a longitudinal service information for women and under five children, permitting workers to plan their work schedule and and serving as a mechanism for supervisors to monitor performance and to identify field problems. This contrasts with the MOHFP system where there is presently no formal recordkeeping system of all eligible women and their children. A simplified version of the Matlab record

keeping system has been introduced in the Extension Areas and been found to be feasible and sustainable, and has contributed significantly to improved household coverage. During the coming period, efforts will focus upon continuing this system and expanding it to incorporate other MCH service data as well.

MOHFP Staff Meetings: In Matlab, the fortnightly system of subcentre meetings represents a key element of the service program, serving as a forum for training where supervisors can discuss workers' performance, where field problems can be raised and addressed, and where a healthy sense of competition in performance can be instilled among workers. Although H&FWC meetings have been mandated by the Government, in practice they rarely occur, and when they do, are rarely geared toward problem solving and management issues. The Extension Project has attempted to improve meetings in the MOHFP program in terms of frequency, regularity, and content, both at the union level as well as at the upazila level with representatives of both the health and family planning wings. Although progress has been achieved in the regularization of meetings, improvements in this area will continue to be a focus during the coming period.

New Activities

Alternatives to Family Planning Targets: During the coming Project period, it is proposed that alternatives to the current system of monthly contraceptive acceptor targets as a means of assessing worker's performance will be tested in the Extension Areas. During the coming period, the project would propose to test feasible performance measures, emphasizing alternative measures of performance such as household visitation coverage, contraceptive prevalence, compatible MCH services, and recordkeeping.

Strengthening District and Upazila Field Management: While a number of interventions to improve management have been tested in the Project areas, it is recognized that the issue of improved supervision and management must begin at a higher level such as the district. Subject to Government concurrence, attention will be given to the testing of an intervention to strengthen upazila field management capabilities through the establishment of additional supervisory posts to support the Upazila Family Planning Officer. An important development during the coming project period will be the establishment of the World Bank Management Development Units (MDUs), who are likely to be based in at least one, and possibly both, of the districts in which Extension Project field sites are situated. Close linkages are envisaged between the Extension Project and the MDUs in introducing/testing interventions aimed at improving management and supervision on a broader scale than is possible in the two Project upazilas.

Expanding Community Participation: Many of the planned or implemented interventions in the Extension Project have had as a primary objective greater community involvement in the delivery of health and family planning services. Primary examples include the establishment of community-donated H&FWCs, expanding coverage through volunteer female workers, and functioning satellite clinics. At the same time, there is recognition that the community is frequently only tangentially involved in the delivery of health and family planning services. An area of focus will therefore be upon identifying mechanisms which will facilitate increased involvement of the community in the service program. As the Matlab experience has illustrated, the fostering of close and collaborative ties with the community is an important component of a successful service delivery system.

B.1.4. National Level Activities

Continuing Activities

Expanded Linkages to MOHFP Policy: During the initial project period, the Extension Project has attempted to foster close linkages with other governmental and non-governmental organizations to disseminate Project research findings and identify priority areas for further experimentation and testing. During the coming Project period, these efforts will be significantly expanded. Linkages to policy decisions within the MOHFP are also maintained by a number of Project staff sitting on key committees or task forces: these include the task force on FWA and HA job descriptions, the National Curriculum Committee for FWA & FWV, NGO Coordination Committee of NIPORT (Training), Sub-committee for Health Planning of Bangladesh Medical Association, the Bangladesh Fertility Research Program Executive Council as well as a number of ad hoc committees which routinely emerge, such as those concerned with development of management information system, with the issue of contraceptive targets, and with supplies and logistics. Donor and non-governmental organizations with whom strong linkages have been fostered include USAID, the World Bank, Canadian CIDA, UNICEF, the Ford Foundation, the Pathfinder Fund, and GTZ. Most commonly, this has taken the form of briefings to these organizations on Project results and experience, and in providing them with Project materials. Field trips to Project sites and demonstrations have also played a major role in disseminating results.

An especially significant association during the coming Project period will be the establishment of linkage with the World Bank Management Development Units (MDUs). It is likely that these MDUs will be established in at least one, and possibly both, of the districts in which Extension Project field sites are situated. A close and symbiotic working relationship is envisioned between the Project and the MDU. The Extension Project represents a vehicle through which these Units may rapidly gain insight into actual program operations and field

conditions at the upazila level and below. The MDUs, given their composition, responsibilities, and location at the district, are otherwise unlikely to be able to achieve this purpose alone in a timely manner. Conversely, the MDUs offer the potential for introducing/testing interventions aimed at improving management and supervision on a broader scale than is possible in the two Project upazilas.

Research Dissemination: During its existence, the Extension Project has produced research findings of local and international policy relevance on a wide range of issues related to health and family planning service delivery and broader population policy (see Appendix D). Given their frequently highly technical nature, Project findings have often remained largely inaccessible to key policy-makers within Bangladesh, including GOB officials, the donor community, as well as other NGOs. In recognition of this limitation, the dissemination of existing Extension Project results will receive more emphasis during the subsequent project period. This will consist of a number of complementary activities:

- 1) the preparation of a series of policy briefing papers which summarize major project findings in a concise and interpretable manner
- 2) the organization of periodic workshops focussing upon specific operational issues involving relevant government officials, donors, and other NGOs
- 3) the development of mailing lists, both national and international, for more effective dissemination of Project papers and policy briefing papers

National FWA Recruitment: As a result of its unique experience with the process of FWA recruitment, the Extension Project has recently been invited to assist the GOB with the planning and implementation of nationwide recruitment and training of additional 10,000 FWAs during the Third Five Year Plan. This technical assistance activity will undoubtedly represent a primary activity of the Extension Project during the 1987-90 period, and will require a major commitment of Project staff and resources. Assistance with nationwide hiring will require the addition of a national-level FWA coordinator and a team of field officers to be based at the district level. The contribution of the Extension Project will include:

- 1) Assisting MOHFP officials with the development of a plan for the phased implementation of nationwide recruitment, including the selection of recruitment areas and the development of a timetable which maximize the utilization of existing training facilities.
- 2) Assisting the MOHFP in the organization and conduction of national workshops for district-level officials, to select upzailas where recruitment will occur, establish new FWA posts on

the basis of population, and outline stringent recruitment procedures which will result in the hiring of the best workers.

3) Organizing and conducting a series of regional workshops involving district level officials in the 20 districts where recruitment will initially occur, as well as upazila level officials in the specific upazilas where recruitment will take place (2 upazilas per district at a time). Specific activities will include the mapping and delineation of FWA work areas on the basis of population, allotment of number and allocation of posts, and clarification of recruitment criteria/procedures.

4) Assisting with the process of national and local advertisement of posts.

5) Provision of counterpart support to district-level officials, particularly to district- and upazila-level officials, in carrying stringent procedures to verify the qualifications of potential candidates, including physical verification of residence, and participation in hiring/selection boards.

6) Maintenance of close liaison with NIPORT and the Regional Training Centers (RTCs) in order to coordinate recruitment and training activities, and therefore to minimize the time required to field these new FWAs.

New Activities

Linkages with the Management Information System Unit (MIS): Discussions are currently underway with the MIS unit regarding the possibility of an Extension Project intern working collaboratively at MIS during the coming year. Two primary responsibilities are envisioned for this individual; first, close liaison with MIS in the development and refinement of a national health and family planning recordkeeping system, drawing on the experience of the Extension Project; and second, assistance to MIS in strengthening capabilities for using research findings to improve management and policy development. Such a linkage would be intended to compliment other potential technical assistance for MIS currently under discussion.

Expanded Linkages to Other NGOs and Local Institutions: A basic premise underlying the Extension Project is that more realistic MOHFP policies, developed through evaluation of realistic field-based implementation experience, can in many cases lead to more effective program functioning. The experience of the Project has also suggested that relatively small technical assistance inputs can frequently have major impacts upon improving the service delivery program.

At the same time, there is growing recognition by policy-makers and donors that barriers to effective service delivery are frequently a function of more than simply uninformed and untested policies. They also often result from a weak capacity

of the government service program to carry out day-to-day service operations. While the Extension Project has attempted, and on a number of fronts achieved, some success in strengthening the government system in its two project sites, legitimate questions remain about how similar results can be achieved on a wider scale in other districts and upazilas.

In recognition of this problem, the Project, while continuing to work at both the field site and national levels when feasible, would propose a new orientation to address this 'gap'-- collaboration with and utilization of the capabilities of other units and NGOs within Bangladesh to strengthen the MOHFP public sector program in the manner of the Extension Project. The most prominent among these units are the Management Development Units, created under the auspices of the World Bank Third Five Year Plan. A desire to replicate or test selected aspects of Extension Project activities related to worker supervision, data collection, and modes of service delivery underlies the concept of these units. Based at the district level, these units will draw heavily on the experience of the Extension Project field sites to formulate and carry out effective service delivery strategies.

It is also evident that there is increased capacity and interest among other NGOs to work collaboratively with the Government program. This trend is likely to accelerate as NGOs increasingly expand into rural areas of Bangladesh. The past relations between NGOs and the government have not been close, and indeed have frequently been competitive in the eyes of many of government officials. There would however now appear to be substantial opportunities for a number of NGOs to enjoy closer and more complementary working relationships with the MOHFP.

A starting point would be a survey of existing NGOs in Bangladesh, both to identify those with the expertise and capacity to work in a collaborative role with Government, and to identify alternative modes of NGO/GOB collaboration which may already be operating in the field. This approach would be distinguished from the Extension Project in two important respects:

- 1) Emphasis would be primarily upon implementation as opposed to research
- 2) Emphasis would be upon interventions which offer the potential for wider geographical coverage

While there must be realistic recognition of the limitations of the Extension Project, there are a number of ways in which the Project could help this process. First, through the dissemination of policy briefs on key project findings, the Project could help identify important areas where NGOs might intercede to strengthen or support the GOB service system. Second, the Project can organize workshops on specific components of the service delivery system, and identify promising NGO innovations for improving

program performance. Third, the project sites would continue to serve as demonstration sites for other NGOs. The close and collaborative linkages with Government that have been established through the Project can serve as a model to help reorient other NGOs in the direction of a supportive rather than competitive role vis-a-vis the MOHFP. Finally, the Project will provide upon request technical assistance to other NGOs to set up and work in the collaborative mode of the Extension Project.

It is also proposed that during the coming Project period, efforts will be made to strengthen linkages to other national institutions and scientists, particularly in the area of collaborative research. Expansion of this area of activity however, is contingent upon the availability of sufficient senior scientific staff within the Extension Project.

Priorities for New Intervention Activities

It is recognized that the research and intervention agenda which has been outlined is broad and extremely ambitious. To a considerable extent, the completion of the proposed research plans depend upon the addition to the Project of new and additional senior scientific staff. From the standpoint of proposed interventions, constraints arise primarily from the limits to the number of interventions which can be tested and evaluated within the Project field sites at a given time. There is therefore a need to prioritize project interventions, although it must be emphasized that this ultimately depends upon the priorities of the Government of Bangladesh, and also upon the interests of Project donors.

For the major part of 1987, the Project's intervention focus will continue to be upon the implementation and evaluation of the increased FWA density study upon service operations. A second area of priority will be the testing of alternative contraceptive targets, tentatively planned for both areas in late 1987 or early 1988. Two other proposed interventions will also be accorded high priority in the near future: in Abhoynagar, the testing of drug mini-kits for female fieldworkers in mid-1988, and in Sirajgonj, the testing of volunteer workers to fill existing vacancies in FWA posts, currently planned for early 1988. At the national level, highest priority will continue to be accorded to assisting the Government with nationwide recruitment of FWAs. In addition, efforts to expand linkages with the MIS unit will be initiated in the fall of 1987.

B.2. Research on Program Performance

The specific aims of this component include:

- a) Through analysis of quantitative and qualitative data collected by the Project, to evaluate the impact of the Project upon fertility, mortality, and service operations.
- b) To conduct operations research studies on barriers to effective service delivery and the determinants of program performance within the MOHFP program.
- c) To study the determinants of health and demographic behavior in rural Bangladesh, and specifically how programmatic and non-programmatic factors interact to determine them.
- d) To carry out research on the policy and programmatic implications of the Matlab service program, with specific emphasis upon the effects of the MCH and family planning program upon maternal and child health and mortality, fertility, and family planning behavior.
- e) To further develop, implement, and test a micro-computer based version of the Sample Registration System (SRS) in the Project research areas.

The Extension Project is in large part a project concerned with operations research issues. Typically, operations research is concerned with the improvement of a service delivery program, achieved through the diagnosis of current field problems and underlying barriers to effective service delivery, and with the testing of new and promising service delivery approaches (Fisher, et al. 1983). The research plan of the Extension Project is in large part concerned with operational issues related to the MOHFP and Matlab service delivery programs. Five principal areas of research activity will be emphasized during the coming Project period: 1) Operations research on the the determinants of health and family planning program service delivery structure and performance, 2) Research on the determinants of demographic behavior and contraceptive use dynamics, and 3) Cost-effectiveness analysis of the MOHFP program, and 4) Evaluation of the policy implications and programmatic effects of the Matlab MCH and family planning service program.

B.2.1. Operational Research Studies

In carrying out project evaluation an operations research studies, the Extension Project draws extensively upon both quantitative and qualitative approaches to data collection and analysis:

Quantitative Data Sources: The SRS roundwise events have been supplemented with additional cross-sectional surveys--most notably, the baseline survey collecting data on socioeconomic and demographic characteristics of sample households, a client KAP survey of eligible women, and a worker questionnaire. The SRS monitoring system together with these cross-sectional surveys

will comprise the primary source of data for quantitative analyses of demographic and service program dynamics.

Qualitative Data Sources: A number of different qualitative data collection approaches are employed, including in-depth interviews, focus group discussions, participant observation, and contact analysis (see Ashraf, et al. 1986).

Examples of ongoing Project operations research studies include:

- the study of factors underlying the decline in sterilization acceptance
- an operational study of the current IUD program
- participant observation analysis of work routines of the male Health Assistant (HA)
- the field supervisory system in the MOHFP system
- the effect of reduced FWA work areas upon worker-client contact and contraceptive prevalence
- the determinants of FWA work performance in the MOHFP system
- variation between new and old FWAs in job performance
- differentials between HAs and FWAs in work routines and job performance in the government program
- the comparison of work performance of old vs. new FWAs
- the comparison of work performance of those FWAs with reduced vs. unchanged work areas

The research program in the Extension Areas during the coming period will continue its focus upon the determinants of health and family planning program performance in rural Bangladesh. The Extension Project's framework for its research program on the determinants of program performance is shown in Figure 1. Major areas of operational research include:

a) The Determinants Service Program Performance: including the utilization of health/family planning services and contraceptive adoption, continuation, choice, and use-effectiveness.

b) The Determinants of Worker-client Contact: including the quantity and quality of contacts between village women and the MOHFP service program. Operational research on these issues will focus upon the relative roles of characteristics of individual workers, the organization of the field program, and the political-administrative context.

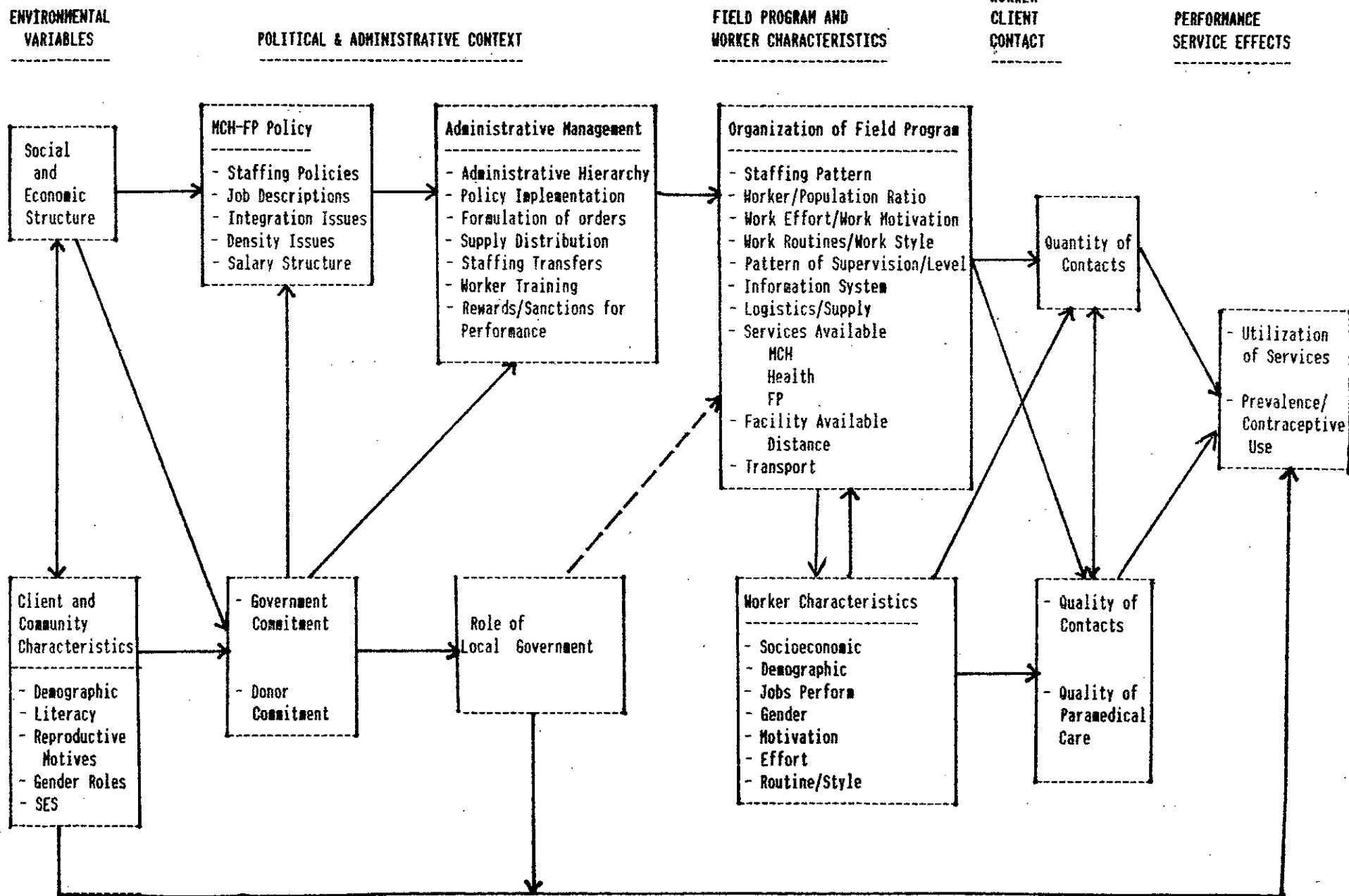
1) Worker characteristics include gender, socioeconomic and demographic characteristics, and individual motivation.

2) The organization of the field program includes the extent to which the program fosters or impedes individual work effort and motivation, staffing patterns and worker-to-population ratios, the system of work and work routines, the pattern and level of supervision, the management information systems which have been established, the system of logistics and supplies, and

the specific health, MCH and family planning services available through the program at the upazila, union, and field levels.

3) The political-administrative context within which the service program operates includes program policies relating to staff size and composition, description and delineation of job responsibilities, integration between health and family planning activities, and salary structure. Key areas of program management include administrative decisions with respect to training programs for workers, the transfer of staff, rewards or sanctions for performance, and the administrative structure and hierarchy of the program.

In the coming project period, the Extension Project will continue its series of highly focused operations research papers on specific components of the government service delivery program. Research on these subjects will employ a mixed method approach, whereby both quantitative and qualitative research methods will be utilized to the fullest extent possible to address these issues. It should be emphasized that given the Extension Project's focus and terms of reference, the specific operational studies to be carried out will be determined by emerging priorities of the national program.



B.2.2. The Determinants of Demographic and Contraceptive Use Behavior

A corollary focus during the coming period will be on the programmatic and non-programmatic determinants of contraceptive, health, and demographic behavior, specifically fertility and mortality, the ultimate indicators of program impact. Equally of interest will be research on the determinants of contraceptive behavior in the project areas, as reflected by contraceptive adoption, method choice, and continuation. In all of these studies, the focus will be upon the relative contributions of, and the interaction between, programmatic and non-programmatic factors.

Much of the data required for these analyses currently resides in the SRS database. During the subsequent project period, these data will be supplemented with several brief SRS supplementary modules-- on household socioeconomic status, gender roles of women and their relation to the service program, non-household health and family planning service utilization by the client population, and a KAP module-- to be undertaken as part of routine data collection procedures (these modules will be submitted to the ERC for clearance prior to fielding). Following the mixed method approach of the project, complementary qualitative studies of specific subsamples of the SRS households under surveillance will also be carried out when appropriate.

B.2.3. Cost-Effectiveness of the MOHFP Service Program

Through Cost-Effectiveness Analysis (CEA) of the Matlab program, the Extension Project has identified the costs of specific project components and the total cost of project services and research vis-a-vis the government's national family planning effort in the Matlab comparison area as well as nationally. Preliminary findings from this analysis suggest that while the Matlab service delivery approach is twice as costly as the government's, the project achieves both significant returns to scale and additional effects, such as a reduction in morbidity, which increase its relative value.

In terms of subsequent cost-effectiveness analysis, a series of analyses based on the cost of individual interventions are planned. (e.g., the costs of alternative delivery systems of injectable contraception, the cost of primary health care, etc.). Each of these papers will examine the cost and logistics of the intervention in the controlled setting of Matlab, draw comparisons from the Extension Areas, make recommendations to the government, assess the actual cost of the government program at the upazila level, and estimate what additional expenses (and specific efforts) would be required to improve, expand or intensify services. Continued research on cost-effectiveness issues in the MOHFP program will be contingent upon the availability of research staff with technical training in this area of research.

B.2.4. Research on the Programmatic and Policy Implications of Matlab

The policy lessons derived from the experience of the Matlab pilot program have represented an integral component of the Extension Project research agenda. During the coming project period, analysis of the Matlab data will continue to receive high priority. A major issue will be a more detailed understanding of the operational lessons derived from the Matlab service program for health and family planning service delivery, as well as the assessment of the impact of the Project upon fertility and family planning dynamics. Given its notable success in the area of family planning, a primary area of investigation will be upon obtaining a more detailed understanding of the underlying dynamics of the sharp rise in contraceptive use in the Matlab program and upon its attendant effects fertility. Of particular interest is a more detailed understanding of the roles of programmatic and non-programmatic factors in the increase in contraceptive use in the Matlab treatment area.

A priority area for research on the Matlab program will be evaluating the impact of the MCH-family planning program on both maternal and child mortality. Of particular interest is the effect of the family planning program, through its impact upon family formation patterns, upon improving maternal and child survival. Planned analysis will examine the associations between birth spacing patterns, unwanted births, and demographically high risk pregnancies, as well as the extent to which the Matlab family planning program may have lowered mortality levels through these mechanisms. Future research will be increasingly addressed to not only the impact of the program upon mortality, but to the important and more proximate indicators of health (morbidity, nutritional status, prematurity, low birth weight) as well. Corollary evaluation of the impact of other major MCH interventions introduced in Matlab upon mortality, such as the tetanus and measles immunization, and oral rehydration therapy, will also be undertaken. While the impact of the service program upon infant and child mortality will continue to receive primary focus, evaluation of the effects of the MCH-family planning program upon maternal health and mortality will also be continued.

C. METHODS AND PROCEDURES

The current proposal is an umbrella protocol addressing a broad range of research issues during the coming five year period. In large part, the protocol represents a continuation of current activities using well-known methodologies which have already been approved by the Centre. Details of new methodologies (if any) would be worked out within the framework of the Population Science and Extension Division. A number of relevant methodological features of the protocol are outlined below:

C.1. Experimental Design

The Extension Project has been set up within an experimental framework which permits the assessment of the overall demographic and service impact of the project interventions. As shown in Table 4, nine randomly selected unions have been selected as the treatment area for interventions (four in Abhoynagar and five in Sirajgonj). The comparison area is comprised of four unions randomly selected from upazilas contiguous to Sirajgonj and Abhoynagar upazilas-- two unions each from Fultala and Golpalpur upazilas-- but lying outside the treatment area districts. In these comparison areas, no services beyond those provided by the usual government system have been introduced.

Table 4: Experimental Design of Extension Project

Area	Abhoynagar	Sirajgonj	Jessore Natural Areas
Treatment	4 unions	5 unions	4 unions
Comparison	2 unions	2 unions	---

To assess the overall impact of Project interventions upon service operations and demographic impact, an important methodological innovation called the Sample Registration System (SRS) has been developed by the Project and implemented in the Project treatment and comparison areas. This longitudinal surveillance system routinely collects demographic and service-related data from a representative sample of approximately 10,000

households (for a description of the SRS see Mozunder, et al 1986). On a 90-day cycle, each household is visited by an SRS team who inquire about demographic events and services received during the intervening period. A six-week cycle for data editing and basic data tabulation permit the rapid feedback of the impact of project interventions upon demographic events and service provision. The SRS has a number of features which differentiate it from other monitoring and evaluation systems:

- permits assessment of project impact not only upon demographic events such as fertility and mortality, but also upon proximate determinants such as contraceptive use as well as service operations
- provides rapid feedback concerning project impact, avoiding long delays in data availability
- cost-effective
- highly accurate and reliable
- flexible so that new components can be added as the need arises
- longitudinal, enabling more detailed analysis of demographic and contraceptive behavior and service operations over time

As shown in Table 5, the SRS routinely monitors information on variables reflecting impact (demographic events such as births and deaths), and also more proximate variables such as contraceptive use and health services received. The SRS regularly monitors indicators of operational aspects of the government service program, such as the frequency of visitation by government health and family planning workers, the topics discussed, and the services provided (see Appendix E for the English version of questionnaire). The collection of baseline socioeconomic and demographic data from both workers and clients has greatly enhanced the utility of these data. Moreover, the flexibility of the SRS has allowed the introduction of several brief cross-sectional surveys during regular data collection rounds, augmenting already collected data.

An additional means of assessing the impact of the project within the Extension Area intervention areas is through the analysis of the service recordkeeping books introduced by the project and maintained by fieldworkers. While these service books will also be analysed on occasion, it should be noted that preliminary evaluation has identified a number of inaccuracies in these registers on some service aspects such as contraceptive use. This finding underscores the importance of a second, independent data collection system such as the SRS, free of the potential biases of combining service delivery with data collection activities.

Table 5: Categories of Sample Registration System Dependent Variables and Specific Indicators Measured

Variables	Indicators
<u>Operational outputs</u>	
Quantity of work	Frequency of client contact with MOHFP staff, by type of worker. ^a
Quality of work	Type and content of exchange.
<u>Intermediate variables</u>	
Contraception	Current use by method.
Health Service Utilization	Health Services Received at the Household Level
<u>Impact variables</u>	
Fertility	Crude birth rates, age-specific rates, total fertility rates, and general fertility rates.
Mortality	Infant mortality rates, neonatal mortality rates, age-specific rates, "cause of death" data.

^a
MOHFP = Ministry of Health and Family Planning

The existence of the SRS and an experimental design permits quantitative analysis of the extent to which the Project's interventions have resulted in a statistically significant effect upon impact variables such as fertility, mortality, contraceptive use, and process indicators such as the quantity and quality of service contacts. This is achieved by the regression analysis of treatment vs. comparison area effects, controlling for the effects of potential variation between areas in background socioeconomic or demographic characteristics (see Phillips, et al. 1984 for a discussion of this model). Additional controls will be introduced for the effects of prior or current variation in treatment effects-- such as the differential effects of training vs. training plus counterpart support unions, old vs. new FWAs, reduced vs. unchanged work areas.

In addition to these treatment and comparison areas, four unions in two other upazilas of Jessore district--termed the 'natural areas'-- provide a means of assessing the effects of the addition of new interventions in areas where no improved management system has been introduced by the ICDDR,B. These

unions are differentiated only by the fact that they have also been subject to an increase in the density of FWAs, and they may therefore provide a more realistic indication of the improvements in service performance which could be expected in the government program in general, with the introduction of improved staffing pattern nationally. The project maintains only a functioning SRS surveillance system in these unions. While set up to evaluate the increased FWA density experiment, these natural areas will provide a means of assessing the realistic expected impact of other interventions as well in the future.

A primary area of interest during this period will be evaluation of the effect of the increased FWA experiment upon the both the quality and quantity of worker-client contact as well as contraceptive prevalence. Specific issues of interest include:

- the comparison of work performance of old vs. new FWAs
- the comparison of work performance of those FWAs with reduced vs. unchanged work areas

The impact of this intervention will be evaluated through both quantitative (SRS service data) as well as qualitative data collection procedures.

C.2. Research Methodologies

In carrying out project evaluation and operations research studies, the Extension Project draws extensively upon both quantitative and qualitative approaches to data collection and analysis. Both approaches are characterized by specific strengths and limitations. Quantitative approaches are useful for providing assessments of overall project effects upon program operations and assessments of demographic impact and trends. This approach, however, is limited in terms of its potential for providing details of internal program dynamics; for example, in describing the content, nature, and quality of exchanges between service providers and the client population. Qualitative approaches, on the other hand, provide a means of assessing program operations and in gaining detailed understanding of specific components of the program. The Extension Project attempts to maximize the advantages of each, by drawing upon both quantitative and qualitative approaches in conducting its research.

Each of these methodologies, as they apply to Extension Project research activities, are briefly described below.

C.2.1. Quantitative Operations Research

The SRS roundwise events have been supplemented with additional cross-sectional surveys-- most notably, the baseline survey collecting data on socioeconomic and demographic

characteristics of sample households, a client KAP survey of eligible women, and a worker questionnaire. The SRS monitoring system together with these cross-sectional surveys will comprise the primary source of data for quantitative analyses of demographic and service program dynamics.

New Activities

Development of MicroComputer-Based SRS: At present, the SRS system is based upon the Centre's IBM 4361 mainframe computer. However, in collaboration with Population Council staff based in Bangkok, a microcomputer-based version of the SRS that will be menu-driven, user-friendly, and streamlined in its operations is currently being developed. This version will be used as a prototype for demonstration to researchers within Bangladesh as well as in other countries. With modifications to suit local social and cultural conditions the SRS can be adapted as a useful tool for evaluation and research activities in other environments. During the 1987-88 period, the Extension Project plans to introduce and test this microcomputer-based version of the SRS in a limited area of the Extension Project field sites. The successful introduction of this new version will require the recruitment of a senior demographer/ statistician and senior data management officer familiar with database design and application. If this microcomputer-based version proves adaptable during the subsequent 6-12 month period, strong consideration will be given to implementing it throughout the Project study areas.

C.2.2. Qualitative Operations Research

The Extension Project has, and will continue during the coming project period, to make extensive use of qualitative methodologies in carrying out its research program (for a more detailed description, see Ashraf, et al, 1986). A number of different qualitative data collection approaches are employed. These include:

1) In-depth interviews: Consisting of semi-structured or unstructured questions to respondents which permit flexibility to probe into issues of interest more deeply.

2) Focus group discussions: Consisting of semi- or unstructured questions administered jointly to groups of selected respondents.

3) Participant observation studies: Whereby a skilled researcher observes and documents a specific component of interest-- for example, the nature of interaction between workers and clients.

4) Content analysis: Whereby written materials are examined and analyzed to assess their appropriateness and implications-- for example, policy directives from the MOHFP.

Qualitative research methods have been effectively used to explore demographic issues in rural Bangladesh in a number of previous studies (see Aziz and Maloney, 1985). The specific qualitative studies to be carried out will be tailored according to the needs of specific operational questions identified as priority areas for further research.

C.2.3. The Matlab Recordkeeping System

The primary source of data to be analyzed for the Extension Project's research agenda on the Matlab program consists of the Matlab service recordkeeping system (RKS). This computerized recordkeeping system is of central importance to the Matlab MCH and family planning service delivery program. This ongoing system consists of monthly data for approximately 15,000 mothers from the period 1977 onward on service-related data such as breastfeeding, reproductive status, contraceptive, and tetanus immunization status. In addition, this service recordkeeping system monitors information on the status of under five children. While initially concerned primarily the birth and death status of these infants and young children, these data have been augmented over time-- to include data on measles immunization from 1982 onward, and more recently, to include monthly data from approximately 15,000 children from 1986 on immunization status, diarrhoeal disease, and nutritional status.

Primary activities in the Extension Project related to the Matlab RKS system include:

- 1) the computerization, editing, updating, and annual printing of the Matlab recordkeeping system for both reproductive-aged women and children under five years of age.
- 2) research using these data to investigate the underlying dynamics of the contraceptive rise in Matlab and its impact upon fertility, and upon the evaluation the effects of the maternal and child health and family planning program upon mortality and health in Matlab.

During the coming period, the RKS system will remain the primary mechanism through which research on the Matlab service program will be carried out. An additional module is planned for early 1988 for one round of the service program to provide an update on attitudes toward family size and family planning among eligible women in the Matlab study area. These individual-level data will be complemented by analysis of aggregate time series data to evaluate the effect of the service program upon fertility and childhood mortality. All of the proposed research will be carried out in close collaboration with investigators from the Matlab MCH-FP and Demographic Surveillance System Projects, located in the Community Medicine and Population Sciences and Extension Divisions, respectively. It is planned that Project activities related to the RKS system will eventually be incorporated into a larger collaborative service and research

protocol with colleagues from the Community Medicine Division, who are in addition responsible for service delivery activities in the Matlab program.

D. SIGNIFICANCE

The Extension Project addresses issues related to family planning and maternal and child health which are of central relevance internationally, within Bangladesh, and within the mandate of the ICDDR,B.

At the international level, the Project addresses the key question concerning the extent to which health and family planning programs can achieve success in reducing fertility and mortality under the constraints of extreme socioeconomic underdevelopment. After nearly two decades of intensive debate, there has been relatively little convergence in views on this subject. The operational and research issues addressed by the Extension Project in both Matlab and the Extension Areas are of central importance in resolving this issue.

At the national level, although a number of pilot projects--including the Matlab Project--have demonstrated that MCH and family planning services can be successfully delivered, their impact upon overall MOHFP program policies has remained quite limited. By attempting to demonstrate that elements of the successful Matlab service program can be transferred or adapted to the public sector program, the Extension Project has demonstrated that it is possible to improve the service performance of the MOHFP system through careful operations research and evaluation. Considerable progress has been made in improving the service program within the Extension Areas, and a number of innovative features of this service program have since been adopted for national policy in Population Plan III. Many of the important Project interventions--most notably the evaluation of the impact of increased FWAs upon program performance, as requested by the Government--require additional time before they can be properly evaluated.

The Extension Project remains one of the few, and perhaps the most significant, mechanisms through which Government orders and directives can be pilot tested and evaluated prior to national implementation, a fact increasingly recognized by the Government of Bangladesh. Just as the Project has had a major impact upon the design and content of Population Plan III, the Project's objectives during the coming period will be to test promising service approaches within its project areas, with the ultimate goal of shaping and suggesting feasible inputs into Population Plan IV.

The issues addressed by the Extension Project are also of direct relevance to the mandate of the ICDDR,B--both directly,

through its efforts to improve the diarrhoeal management service delivery system within the Government program, as well as indirectly through its efforts to improve the family planning and maternal and child health programs in order to improve overall health conditions and achieve reductions in fertility and mortality.

For these reasons, strong justification exists for continued activities by the Extension Project during the coming three year period.

E. FACILITIES REQUIRED

No special facilities are required to undertake this protocol. Due to the collaborative nature of the project, the Government has provided office space to project staff in the two rural field sites. Dhaka staff are provided with office space by the ICDDR,B in the Animal House and in a coding building. The current and future possible expansion of Project activities underscore the need to secure additional office space for the Extension Project.

F. COLLABORATIVE ARRANGEMENTS

The Extension Project is a collaborative project between the ICDDR,B and the Government of Bangladesh MOHFP, with the overall objective of improving the field health and family planning field delivery system and ultimately levels of fertility and mortality. During its initial period, the Project has developed and maintained close collaborative ties with a number of Ministry officials on a regular basis. During the subsequent Project period, this collaboration has been formalized through the establishment of a National Steering Committee comprised of key MOHFP officials from both the Health and Family Planning wings along with ICDDR,B staff. The function of this committee will be to meet regularly to review the progress of the Project, and to decide future Project directions. At the upazila-level field sites, Project Implementation Committees, comprised of senior upazila health and family planning officers and ICDDR,B staff, meets on a regular basis to review the status of Project interventions and to discuss future intervention activities.

Within the Population Science and Extension Division, where the Project is located, close collaboration will be maintained with the DSS (Matlab). In addition, collaboration with the Community Medicine Division will be continued with respect to the Matlab MCH-FP services and research component, and in particular, with the ongoing Recordkeeping System (RKS) in MCH-FP.

The Project hopes to receive continued technical assistance from the Population Council during its coming phase. Funding is expected to continue from the United States Agency for International Development. In addition, some supplementary funding is expected from the Canadian International Development Agency. The Project will draw upon suitable international and national-level consultants to execute the ambitious work plan.

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ABSTRACT SUMMARY: PARTICULARS

1. (Describe the requirements for a subject population.)

There is no subject population in the proposed study in the sense that we are training Government workers to provide services. There is a subject population in the sense that government workers and the rural population will be studied and will be informed of the nature of the research prior to work.

2. (Describe risks to the population.)

There are no risks; social, legal or otherwise.

3. (Describe procedures for protecting against or minimizing potential risks.)

Not relevant.

4. (Describe procedures for safeguarding anonymity.)

Although in questionnaires individuals are identified by name, to preserve confidentiality, unique identification numbers will subsequently be used. All analysis will be anonymous.

5. (Signed consent.)

The Extension Project will operate within the MOHFP system. All consent procedures of the MOHFP will be in force when ICDDR,B personnel are present. In case of research studies, standard approved consent procedures will be followed, as at present.

6. (Interview procedures.)

Respondents will have the right to refuse.

7. (Possible benefits.)

Our aim is to improve the quantity and quality of MOHFP primary health care. If this succeeds, research should show reductions in fertility, mortality, and improvements in overall health. This research will also aim to identify more general operational problems with implications for national health care delivery.

8. (Records)

Sample vital registration records will be maintained on the Matlab/Teknaf DSS model. Other qualitative and survey data will be collected and analyzed, maintaining procedures of anonymity and access as required by the Centre.

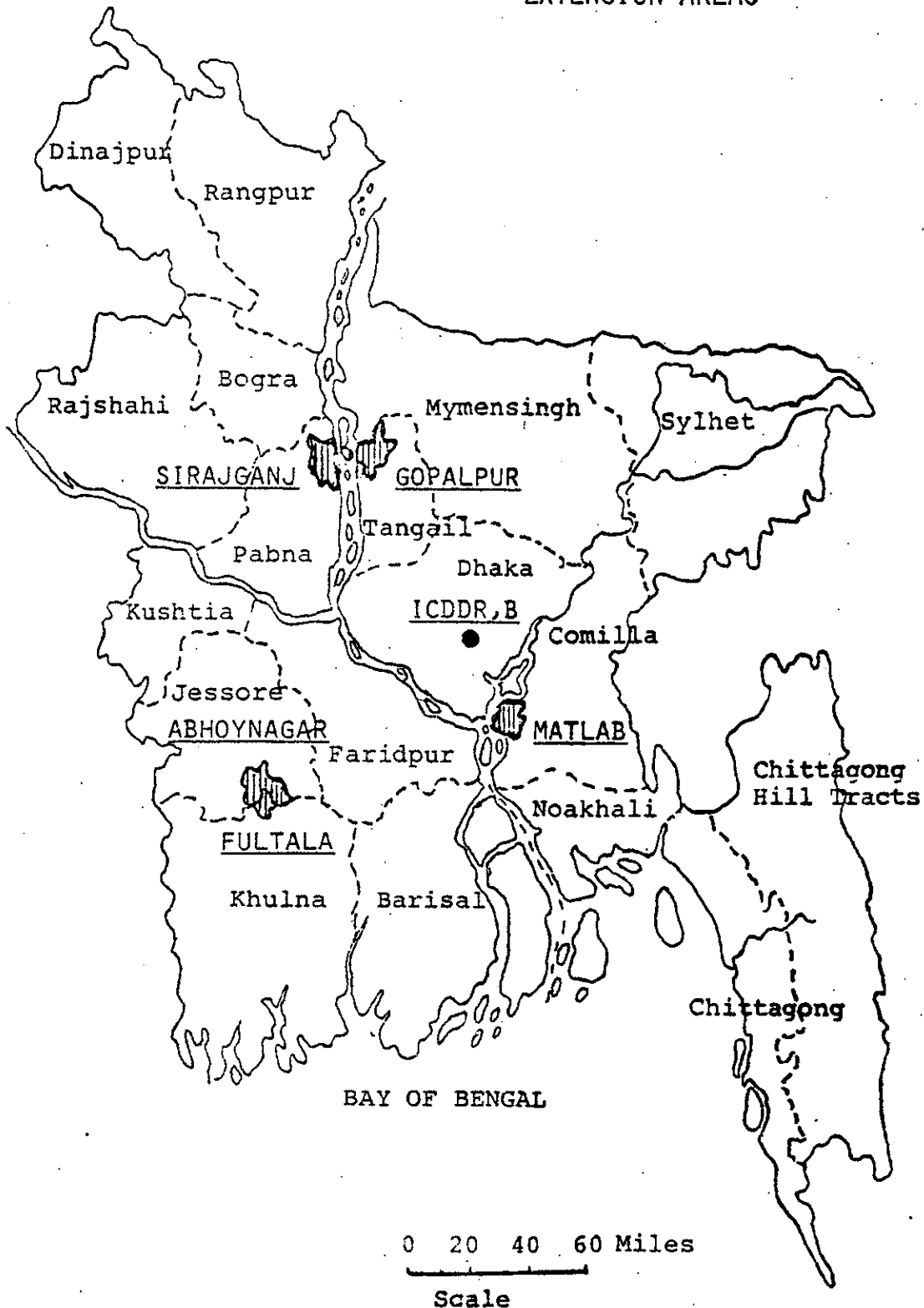
PROCEDURE TO MAINTAIN CONFIDENTIALITY

While individuals have initially been identified by name, all respondents in the study have been subsequently assigned a unique identification number, following the practice of the demographic surveillance systems in Matlab and Teknaf. Standard Centre procedures for maintaining and ensuring confidentiality and anonymity will continue to be followed. Staff with access to the identifying information are trained and aware of its confidential nature.

APPENDIX - A

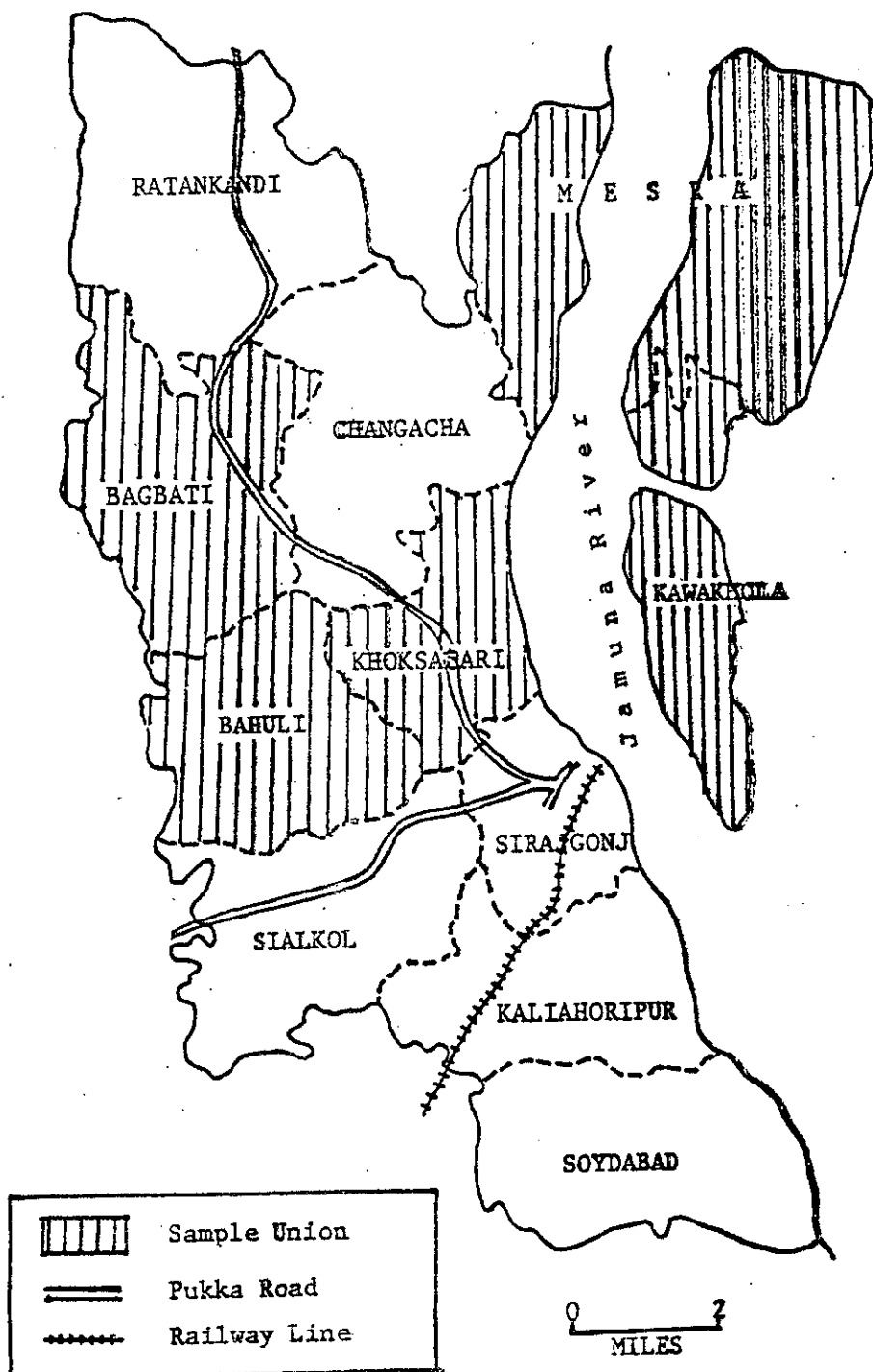
MAP 1

BANGLADESH
DISTRICTS
AND
EXTENSION AREAS

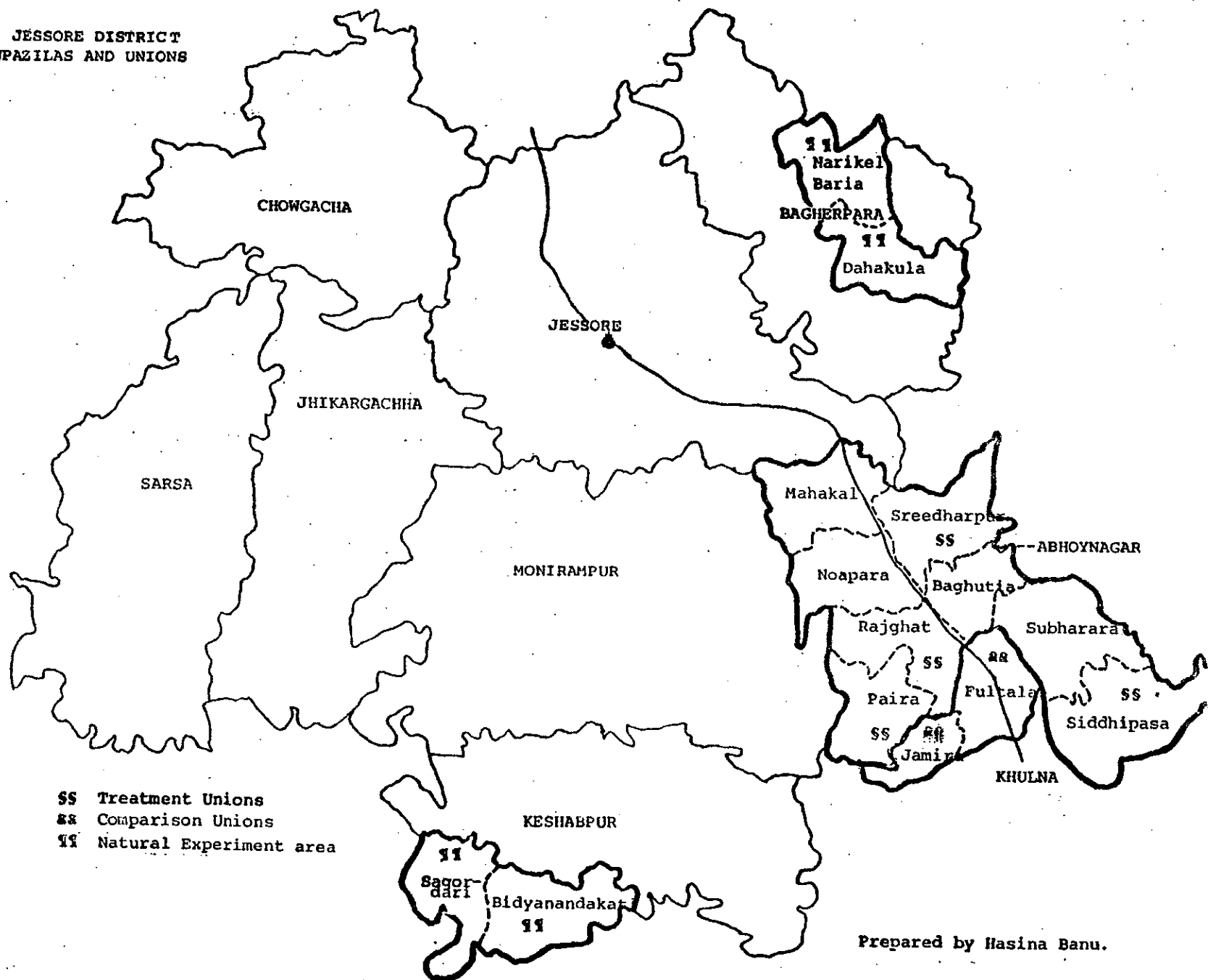


MAP 2

SIRAJGONJ UPAZILA



JESSORE DISTRICT
UPAZILAS AND UNIONS



Prepared by Hasina Banu.

APPENDIX B

Fieldworker Density

A low fieldworker to population ratio is a major impediment to the effective delivery of outreach MCH and family planning services. In the Matlab Project, there is one female outreach worker (CHW) per approximately 1100 population or 200 eligible women. This allows household visitation cycles to each woman in a CHW's work area every fortnight. In the government program, in contrast, where work areas have until recently been assigned geographically on the basis of the ward, the average female outreach worker (FWA)-to-population ratio is 1: 7500 population. This means that on average, 3-5 months is required for an FWA to visit every woman in her work area. Work areas also differ substantially in size in these two different programs, with government FWAs required to cover substantially larger geographical areas, frequently several miles from her home and in unfamiliar territory. This latter visitation frequency is clearly inadequate for the worker to establish meaningful rapport with clients, or to effectively deliver either family planning or MCH services.

Quality of Services

The Matlab service program began as a comprehensive family planning program with limited MCH back-up services. This program has always emphasized a broad range of contraceptive methods, delivered in the most convenient and accessible manner possible, usually at the household itself. The CHWs, in addition, carry basic medical supplies, and equally importantly, provide regular access to a well-established and reliable system of medical back-up. With the establishment of this system, the service program has been gradually and carefully expanded in recent years to include a more extensive range of maternal and child health services as well.

While officially the government program would appear to bear considerable similarity to the Matlab program, in reality it differs significantly in terms of the range and quality of services. A government system of monthly contraceptive targets emphasizing sterilization, the primary basis for measuring a worker's performance, tends to skew the FWA's efforts primarily toward the recruitment of sterilization acceptors. Government policies prohibiting fieldworkers from carrying medical supplies means that the FWA will have little or nothing to offer to treat illness or contraceptive side effects. A weak linkage between the FWA and the female paramedic in the government system means that an effective system of referral for contraceptive or other health problems does not exist.

Field Supervision

A key component of the Matlab system is a strong and well-defined system of dual field supervision. In the Matlab system, technical supervision is distinguished from administrative supervision, with different individuals responsible for each. Responsibility for technical supervision of the CHW lies with the union-level female paramedic, ensuring a strong linkage and medical back-up both at the union-level as well as in the field. Male supervisors assume administrative responsibility for the CHWs, checking field attendance, the accuracy of recordkeeping, and when required, motivating reluctant husbands for family planning.

In the government program, responsibility for field supervision of the FWA rests with a male supervisor, posted at the union level. In reality, his position and job responsibilities are poorly defined, he possesses little meaningful authority, and his actual field presence has been found to be minimal. While the female paramedic posted at the union clinic could provide supervision over FWAs on technical matters, she has been given no formal authority over the FWA, and thus coordination in this key area remains limited. Under the current system, field presence and supervision on either technical or administrative matters by upazila-level officials is also largely absent. Thus, overall field supervision of FWAs from any level is extremely weak.

Recordkeeping

A key component of the Matlab service program is a comprehensive system of longitudinal recordkeeping developed to assist the CHW with the delivery of MCH and family planning services to women and children in her area. This system allows the CHW to plan and organize her work schedule and provides a service history of each woman and her children. Equally significantly, it provides a basis for her field supervisor to check and evaluate the accuracy and regularity of her field work, and to identify problem cases in need of further medical attention.

In the government system, no formal system of longitudinal recordkeeping by FWAs exists. While records of contraceptive acceptors and supplies are maintained, they are of variable quality. Perhaps more significantly, records which are collected are done so primarily to forward to upazila and national-level officials. The FWA does not use these records to plan or manage her service delivery; since they are not longitudinal, they provide little useful background information about previous problems or complications; since there is no list of eligible women, they are of little assistance in planning or organizing work schedules; and they do not provide a meaningful basis for supervisors to evaluate a worker's performance or to supervise her activities while in the field. Recordkeeping activities of

the fieldworker are thus a ritual in the government system in response to orders, rather than a tool for supervisors and workers for managing the field program

System of Meetings

In the Matlab program, regular meetings play an integral role in supervision and planning. Regular meetings are held fortnightly at the union level, coinciding with the completion of each CHW's work cycle. In these meetings, the performance of each worker is summarized and reviewed, problem cases are treated by paramedical or medical staff, field problems are discussed and plans for field visitation are drawn up, and regular new or refresher training is carried out. For the CHWs, these meetings serve the purpose of discussing and resolving field problems, reviewing their performance relative to their peers, and providing input into future activities. The meetings serve equally important functions for supervisors, since they provide a forum to evaluate the performance of workers and to plan their own schedules to support workers and clients.

In the government program, the system of monthly meetings is utilized primarily for picking up salaries and supplies. Use of this meetings for discussing field problems, reviewing performance, and problem solving is infrequent or nonexistent. Meetings in the MOHFP system are thus oriented toward fulfilling administrative procedures, rather for meaningful or effective dialogue geared toward improving field management.

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REPORTS FROM CONFERENCE PROCEEDINGS

1. Koblinsky, M.A., R. Simmons, J.F. Phillips, Md. Yunus.
"Barriers to Implementing an Effective National MCH-FP Program." In Selected Papers of the 1984 Annual Conference of the National Council for International Health. Debbie Kluge (ed.), June 11-13, 1984, Arlington, Virginia. pp 195-207
2. Phillips, J.F., R. Simmons, G. Simmons and Md. Yunus.
"Transferring Health and Family Planning Service. Innovations to the Public Sector: An Experiment in Organizational Development in Bangladesh", In Selected Papers of the 1984 Annual Conference of the National Council for International Health. Debbie Kluge (ed.), June 11-13, 1984, Arlington, Virginia. pp.177-195.
3. Yunus, Md., M. Koblinsky, R. Simmons, J.F. Phillips.
"Strategies for Implementing Change in a Rural Health and Family Planning Program in Bangladesh." In Selected Papers of the 1984 Annual Conference of the National Council for International Health. Debbie Kluge (ed.), June 11-13, 1984, Arlington, Virginia. pp 236-244
4. Phillips, J.F., M.A. Koblinsky and A.A.Z. Huque
"Researching the Utilization of Research for Health Policy Development: A Case Study in Bangladesh." Workshop Report No. 2 of the Community Epidemiology, Tamil Nadu, India, 25-29 March, 1985.

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INTERNATIONAL CONFERENCE PAPERS

1. J.F. Phillips and K.A. Mozumder
"A Multivariate Analysis of Social and Economic Determinants of Neonatal and Infant Mortality in four Rural Thanas of Northern Bangladesh." Paper presented at the Annual Meeting of Population Association of America in Minneapolis, Minnesota - May 1984.
2. J.F. Phillips, D. Leon, M.A. Mozumder
"The Design of Sample Registration System for Monitoring Demographic Dynamics and Health and Family Planning Service Operations in Rural Bangladesh." Paper presented at a Symposium on the Use of Microcomputers for Management and Science - Applications and Policy Directions, Colombo, Sri Lanka, Nov. 4-10, 1984.
3. M. Rahman and J.F. Phillips
"An Investigation into Proximate Determinants Responsible for Fertility Differentials between two Rural Bangladesh Populations." Paper presented at the 2nd Annual Conference of the Indian Society for Medical Statistics held in Lucknow, Nov. 23-24, 1984.
4. K.A. Mozumder and J.F. Phillips
"Baseline Vital Event Rates for Four Upazilas of the MCH-FP Extension Project for 1983 as Reported by a New Data Base System of Demographic Assessment - Paper for a Symposium on the Use of Micro-Computers for Management and Science." Applications and Policy Directions, Colombo, Sri Lanka, Nov. 4-10, 1984.
5. J.F. Phillips, R. Simmons, M.A. Koblinsky
WPS #3 "Bureaucratic Transition: A Paradigm for Policy Development in Bangladesh." Paper prepared for the Seminar on Societal Influences on Family Planning Program Performance of the International Union for the Scientific Study of Population, Jamaica, April 10-13, 1985.
6. R. Simmons, M.A. Koblinsky, J.F. Phillips
WPS #12 "Client Relations in South Asia: Their Programmatic and Societal Determinants." Paper prepared for the Seminar on Societal Influences on Family Planning Program Performance of the International Union for the Scientific Study of Population, Jamaica, April 10-13, 1985.

INTERNATIONAL CONFERENCE PAPERS (CONT'D)

7. J.F. Phillips, M.B. Hossain, M.A. Koblinsky.
 "The Determinants of Contraceptive Choice in Bangladesh: A Multinomial Hazards Regression Analysis of the Effect of an Experiment in Organization Development on Contraceptive Adoption and Choice Among Rural Nonusers." Paper presented at the Seminar of the East-West Population Institute on the Determinants of Contraceptive Method Choice, Honolulu, Hawaii, August 26-29, 1985.
8. J.F. Phillips, R. Simmons, M.A. Koenig, M.B. Hossain
 "Worker-Client Exchanges and the Dynamics of Contraceptive use in Rural Bangladesh." A paper prepared for the Annual Meeting of the Population Association of America, San Francisco, California, April 2-5, 1986.
 WPS #10
9. M.A. Koenig, A.I. Chowdhury, V. Fauveau, J. Chakraborty
 "Maternal Mortality in Matlab, Bangladesh." Paper prepared for the Annual Meeting of the Population Association of America, San Francisco, California, April 2-5, 1986.
 WPS #19
10. A.B.M. Mozumder, J.F. Phillips, D. Leon, M.B. Hossain
 "The Sample Registration System: A Microcomputer System for Monitoring Demographic Dynamics and Health and Family Planning Service Operations in Rural Bangladesh." Paper presented at the Annual Meeting of the Population Association of America, San Francisco, California, April 3-5, 1986.
 WPS #8
11. M.A. Jalil
 "A Multivariate Analysis of Measurements of Socio-Economic Status from Rural Areas in Bangladesh." Paper prepared for presentation at the Fourth Annual Conference of Indian Society for Medical Statistics, 24-26 November, 1986, Bangalore, India.
12. Md. Shahidullah, M.A. Koenig and B. Wojtyniak
 "Evaluation of Neonatal Mortality Reduction Achieved Through a Tetanus Immunization Program in Matlab, Bangladesh. I. The Impact of the 1974 Vaccine Trial." Paper prepared for presentation at the Fourth Annual Conference of Indian Society for Medical Statistics, 24-26 November, 1986, Bangalore, India.
13. Md. M.A. Khan, C. Smith and M.A. Koenig
 "Contraceptive Dynamics in the Matlab Treatment and Comparison Areas: Insights from a 1986 Survey." Paper prepared for presentation at the Fourth Annual Conference of Indian Society for Medical Statistics, 24-26 November, 1986, Bangalore, India.

INTERNATIONAL CONFERENCE PAPERS (CONT'D)

14. A.I. Chowdhury, M.A. Koenig, J.F. Phillips and Md. Shahidullah
"Sex Composition and Fertility Behaviour Matlab, Rural Bangladesh." Paper prepared for presentation at the Fourth Annual Conference of Indian Society for Medical Statistics, 24-26 November, 1986, Bangalore, India.
15. M.A. Koenig and B. Wojtyniak
"Excess Female Mortality During Infancy and Early Childhood: Evidence from Rural Bangladesh." Paper prepared for presentation to the BAMANEH-SSRC Workshop on Differential Female Mortality and Health Care in South Asia, to be held in Dhaka, Bangladesh, January 4-8, 1987.
16. J.F. Phillips, T.K. LeGrand, M.A. Koenig and J. Chakraborty
"The Effect of a Maternal and Child Health -- Family Planning Project on Infant and Child Mortality in Matlab, Bangladesh." Paper presented at the Population Association of America Meeting, Chicago, April 30 - May 2, 1987.
17. Ruth Simmons, J.F. Phillips, M.A. Koenig and A.A. Zahidul Huque.
"Implementation-Based Policy Development in Bangladesh". Paper presented at the Population Association of America Meeting, Chicago, April 30-May 2, 1987.

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LOCAL CONFERENCE PAPERS

1. J. Akbar, J. Chakraborty, N.Jahan, J.F. Phillips, A.P. Satterthwaite
WPS #1 "Dynamics of Depot Medroxy Progesterone Acetate (DMPA) Use Effectiveness in the Matlab Family Planning Health Services Project." Paper presented at the 7th Annual Contributors Conference of Bangladesh Fertility Research Programme, Dec. 8-9, 1982.
2. J. Akbar, J. Chakraborty, N. Jahan, J.F. Phillips
"The Use-Effectiveness of Tubal Ligations Performed in the Matlab Family Planning Health Services Project, 1978-82." Paper presented to the 8th Annual Conference of BFRP, January 22-23, 1984.
3. A.I. Chowdhury and J.F. Phillips
"Socio-Economic and Demographic Differentials Among Eligible Women on Reproductive Age for Treatment and Comparison Areas of the Family Planning Health Services Project, Matlab." Paper presented at the 9th Bangladesh Science Conference held at the University of Chittagong, Bangladesh. March 3-7, 1984.
4. A.A.Z. Huque, M.A. Koblinsky, J.F. Phillips
WPS #2 "Operational Barriers to Implementing a Domiciliary Injectable Contraceptive Programme in Rural Bangladesh." Paper for presentation at the Bangladesh Population Association Confernece, Dhaka, August 1984.
5. A.I. Chowdhury, J.F. Phillips, A.K. Shaikh
"The Trends in Neonatal, Infant and Child Mortality Over the Baseline and Project Periods of the Matlab Family Planning Health Services Project." Paper presented at the 2nd National Conference of Bangladesh Population Association, August 22-24, 1984.
6. M.B. Hossain and J.F. Phillips
"A Factor Analysis of Economic Status Indicators from Four Rural Upazilas of Bangladesh." Paper presented at the Bangladesh Population Association Meeting in Dhaka, August 22-24, 1984.
7. M.A. Zaman and S.M.S. Islam
"A Case Study of Factors Contributing to a Rapid Increase in Contraceptive Prevalence in a Low Prevalence Union." Paper presented at the 9th Annual Conference of Bangladesh Fertility Research Programme (BFRP) held on 14th and 15th November, 1984.

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LOCAL CONFERENCE PAPERS (CONT'D)

8. Md. L. Ali, Md. A. Rahman, A. Rahman
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MCH-FP EXTENSION PROJECT
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63	The Economic Gains and Cost of Expanding the Number of FWA's Employed by the National Family Planning Program. October 1986	Simmons, G. Balk, D. Rob, U.

MCH-FP EXTENSION PROJECT FIELD IMPLEMENTATION STRATEGY AND POLICY IMPACT

MCH-FP Extension Project Interventions

Local Level Impact

National Level Impact

Human Resource Development (HRD):

- Task oriented training of all field and clinic level health and family planning workers with their immediate supervisors. Training upazilla and union based, not RTC based.

Modification of Matlab: Upazilla officials conducted training, not union level staff.

The workers as well as their supervisors have improved their knowledge, skills and attitude.

National Institute of Population Research and Training (NIPORT) has recommended the use of task oriented training for field workers on the adaptive Extension Model. The Director, NIPORT has sought assistance from the project to develop a Family Welfare Assistant (FNA) curriculum and training materials.

Developed Pre Training Orientation (PTO) and Training of Trainers (TOT) for the FNA curriculum with NIPORT. The project has contributed towards the development of FNA curriculum and training materials.

A six-day Pre-Training Orientation (PTO) and one-day Training Of Trainers (TOT) for PTO developed by the Extension Project has been adopted in the national FNA training program.

- Training of Family Welfare Visitors (FWV) and Medical Assistants (MA) on quality service delivery at H&FWC.

No Modification.

Improved clinic management, better screening and administration of IUDs, injectables, oral pills, and efficient MCH service delivery have taken place.

The Extension Project is requested to participate in FWV curriculum and training materials development. The Extension Project is requested to develop and implement the Senior FWV training programme.

8. Improved Field Management:

- Introduction of a clientele based longitudinal Information System.

Modification of Matlab: Record books modified for MNFP needs.

The workers are maintaining longitudinal information of client's status and using the book for monitoring their performance and the supervisors are using reports as a management tool for the programme.

The management information system (MIS) of the Population Control Division has accepted the idea of client based record keeping system and a modified record keeping is being field tested.

- Development of regular field work routines by the health and family planning workers to provide comprehensive FP and MCH services.

Modification of Matlab: Visitation less frequent.

The upazila level government officials have identified the time required for a complete round (3-5 months for FNA and 2 months for MA) and suggested the need for more female workers to develop an effective service delivery system.

The Ministry has recognized the problem and plans to recruit ten thousand female workers over the next five year period. The government has selected the Extension Project to conduct a pilot study on 'Increased FNA Density'. Participation in development of operational procedures for increased FNA density (Sanctioning of post, development of guidelines for recruitment).

NCH-FP Extension Project InterventionsLocal Level ImpactNational Level Impact

The Extension Project has been providing technical assistance to the Family Planning Directorate in the nation-wide recruitment and deployment of 10,000 FWAs by 1990. In response to the GDB request the project has assigned a contingent of 13 senior level staff (one national coordinator and 12 senior field conductors) in order to provide technical assistance.

- Monthly meeting at the Health and Family Welfare Centre (H&FWC) of the field and H&FWC staff with their supervisors to review performance, generate interest in work among workers, resolve field problems and develop strategy for future programme.

Modification of Matlab: Monthly meeting rather than fortnightly.

- Monthly meeting of the supervisors at the upazila to review and monitor the workers' performance.

No Modification.

- Improved supply system has been developed through meeting and workshop.

Modification of Matlab: Modification done as per MOHFP needs.

- Establish joint management committees, Project Implementation Committees (PIC).

Modification of Matlab: No MOHFP collaboration in Matlab.

The upazila officials have developed a new concept of supervision and workers are provided with improved support through discussion and action.

The Family Planning Assistants (FPA) have increased their field mobility and supervision of the FWAs.

Supply of drugs and logistic flow are regular at Upazilla and below.

The Project Implementation Committee reviews the programme activities, identifies the problems and develops strategies to resolve problems.

The ministry has recognized that H&FWC meetings can be utilized for programme management at local level and thus attached much importance to regular meeting at H&FWC.

Senior officials have attended these meetings and are learning about the mechanisms for establishing supervisory leadership and peer support.

Senior level officials have discussed the improved supply system and importance has been attached for regular & adequate supply. The allocation of D.Ds kits has been increased to both constructed and non-constructed H&FWC.

The Ministry has acknowledged the potentials of these committees by assigning responsibility to field test Worker's Award Scheme, doorstep injectable contraceptives by FWA, and to manage the new FWA density experiment.

H-FP Extension Project Interventions

Local Level Impact

National Level Impact

Technical Interventions

Set up MCH and FP clinics in the community donated facilities where there is no H&FNC.

No Modification.

Introduction of injectable contraceptive by FNAs at the doorstep of the client.

Modification of Matlab: No 6 month regimen.

Development of satellite clinic to provide MCH and FP services specially home based Cu-T insertion.

Modification of Matlab: Transportation problems limit service coverage.

Introduction of field-based Expanded Immunization Programme (EPI) using male health assistants.

Modification of Matlab: No male workers in Matlab.

Miscellaneous:

The upazila officials have learned the potentials of the community support and developed the attitude of working with the community. Upazila officials have also identified the basic needs for a functioning H&FNC.

The contraceptive prevalence has increased by 5%. The local officials and workers learned how to operate a domiciliary injectable programme and have identified the barriers to implement the programme.

FNVs are providing MCH services and inserting Cu-T at and around the satellite clinic. Upazila officials have documented the minimum necessary facilities for a satellite clinic.

Upazila level officials have learned the advantages and disadvantages of various operational strategies for EPI and have recommended campaign approach for Tetanus Toxoid and routine programme for multiple vaccines.

Project staff has been requested to sit on the District Coordination Committee (Health).

The Ministry has recognized the potentials of community donated H&FNC and has agreed to provide MLSS (Peon) and Aya for these centres. The DG, Population has shown his keen interest for providing more drugs to the community donated centres.

The Ministry is closely observing the performance of the Extension Project and waiting for its recommendation for national replication.

Increased awareness among policy makers regarding the potential of a domiciliary injectable programme.

A high level expert group workshop held on 25th August, 1985 strongly recommended to continue injectables as a method for the national programme.

The ministry has recognized the importance of satellite clinic and reinforcing its implementation.

Key health officials have learned about field-based immunization programme through presentation of EPI strategy to Health Secretary, VHSS, and Project Director, EPI. The Govt. have launched a national EPI movement to immunize 85% of children under 2 and women of reproductive age by 1990.

The project has been requested to assist in developing job description for different field cadres of the ministry.

The ministry has sought assistance to set up programme priorities and to develop strategies for implementation.

E. Visits by Government Health Workers

You will ask three questions: Q-A, Q-B and Q-C for each visit. Instructions for these visit questions have been detailed below. You will record the responses in the spaces provided in the SHF under each visit and respective question.

i. What are the questions on visits?

There will be three major operations research questions on visits. You are to state the precise question as it is worded and not deviate from the instruction stated below.

First probe: Do you remember me or my team member ?

(If no: probe to identify ICDDR,B workers as in 5 above.)

(Probe): Do you remember my last visit ?

(If no: Help her remember your last visit by citing from the event of HRB or any other occurrence.)

(If yes ask):

Question A. (Q.A) "Since my last visit on (NAME DATE) has any government health or family planning worker visited you at your bari?

YES or NO

(Note that this visit can refer to the simple observation of a worker in the Bari when no discussion occurs between the respondent and the worker.)

If the response is "No" this is the end of the O/R interview. (Probe the response as specified above before you leave the respondent).

(To clarify workers, probe statements for health worker are):

"Well, did any male worker come to your bari who gave you vitamin tablets, signed a card, inquired about fever, took blood slide, or from time to time gave vaccinations ?"

(Probe statements for family planning worker are):

"Did a woman discuss with you about family planning, give you pills, condoms, or advise about accepting a method ? Did she take you or a neighbor to the hospital for the operation?"

(Probe statement for a team of workers):

"Sometimes that woman may be accompanied by a male

person. Did a man and a woman worker visit your bari?"

(If No visits): Code NNN. Terminate O/R interview.

(If YES, probe): "How do you know that this was a government worker?" (Follow items 5 and 6 above)

(If YES, state): "I want you to think of the first such visit since (NAME DATE)".

"Was that government worker a male or female, two or more males, two or more females or did both male and female workers visit your bari together?"

The current basic coding is:

Male worker only	- M
Female worker only	- F
Both male and female worker	- B
Two or more males	- X
Two or more females	- Y
No, no government health or FP worker	- N

(If one visit): "Now, were there visits after that visit?"

(If yes: REPEAT ENTIRE CYCLE)

(IF BOTH VISITED SEPARATELY REPEAT QUESTION CYCLE FOR EACH).

See the code plan, Attachment 4, page ____, for the detailed breakdown of how these replies are now coded.

Probes Before Question-B... 1. "Did he/she/they speak with you?"

If yes, go to 4. below.

2. (If no, probe): "Did he/she/they speak with any other member of your family?"

If yes, go to 4 below.

3. (If no, probe): "Did he/she/they send some else to speak with you?"

If yes, go to 4. below.

- 3-A. (If no, probe): "Did they sign the card only? Do GR updating only?"

If yes, either code CN or GR as appropriate for 2nd and 3rd questions, terminate interview or inquire re other visits.

4. Question B: "What did he/she/they discuss?"

(Note that the term "discuss" refers not only to when the respondent is spoken to directly, but also when she listens to a discussion held with someone else.)

When Question B is asked it is considered a discussion if the Respondent :

A - Spoke directly with health worker

B - Spoke through another household member to the worker. (e.g. via husband or another)

C - If heard discussion by health workers as part of a group.

It is not considered a discussion if the respondent observed something being said but did not actually hear it.

Identification Card

You will be issued with an official identification card to show the respondent. Show this card to the respondent as part of your introduction. You might begin by saying:

"Assala-mualaikum, I am ----- from the ICDDR,B. Here is my identification card. We are taking a registration of the members of a sample of households in ----- and collecting information on the occurrence of events such as births, deaths, marital status change, migrations in those households. Your household has been selected and I have some questions I would like to ask. Firstly, could I check the names of the usual members of the household?"

IF NO QUESTION PUT BACK TO YOU BY RESPONDENT, SEE PAGE NO. 12

How to Explain the System

If the respondent requires further information about the survey, your explanation should include the following points

- The purpose of the SRS
- The authorization of the SRS through the MOHPC
- The voluntary nature of the SRS so that respondents understand that there are no penalties for refusal to respond.

For example it is appropriate to develop a simple to understand Bangla variant on the following theme:

"The ICDDR,B is conducting the registration system to obtain up-to-date information on household statistics to help measure the effectiveness of the current health and family planning services in the area. Participation is voluntary and there are neither penalties for refusing nor rewards for participating. However, your cooperation in obtaining this much needed information is extremely important in order to ensure the completeness and accuracy of the statistical results."

You should adequately explain the SRS on each interviewing round. Such a Bangla explanation is:

আমরা ঢাকাতে কয়েক হাজার ঘরোয়া লোকজন। বাংলাদেশ সরকারের সহযোগীতায় বঙ্গ
খানার মা ও শিশুর স্বাস্থ্য ও পরিবার পরিকল্পনার চিকিৎসা, সেবা ও ব্যবস্থাপনা
উন্নয়নের উদ্দেশ্যে কাজ করছি। প্রদত্ত চিকিৎসা, সেবা ও পরামর্শসমূহের কার্যকারিতা
যাচাই করার জন্য কিছু সংখ্যক ঘরোয়া খানাতে জন্ম, মৃত্যু ও স্বাস্থ্য সম্পর্কিত তথ্যাদি
নিবন্ধন করছি। সঠিক ও পূর্ণাঙ্গ তথ্যের জন্য আপনার সহযোগীতা আম.সর. প্রয়োজন।

Questions and Answers

The following are examples of questions that respondents may ask and explanations that you could use.

Q. Why don't you go to ----- household?

A. The SRS is based on a scientifically selected sample of households across the thana. Since this is a sample registration system, we cannot substitute one household for another without adversely affecting the results. Some simple example of sampling to taste cooking will usually suffice:

অথবা কারণ আমরা নমুনা তিষ্ঠিতে তথ্য সংগ্রহ করি। সেজন্য সবাইকে জিজ্ঞাসা না করে শুধুমাত্র নটারী তিষ্ঠিতে নির্বাচিত কিছু খানার তথ্য সংগ্রহ করলে সবার কথা জানা যাবে। যেমন চান ভাতে বৃগাবুর হয়েছেন কিনা তা দেখবার জন্য আপনারা মাত্র কয়েকটি চান টিপে দেখে থাকেন এবং তার তিষ্ঠিতে সিদুানু গ্রহন করে থাকেন। তদুপায় আমরা নটারীর মাধ্যমে নির্বাচিত কিছু সংখ্যক নমুনা খানার সদস্যদের সূক্ষ্ম ও তৎসংক্রিয় তথ্যাদি জেনে সবার সম্পর্কে সুষ্ঠু নীতি নির্ধারণের জন্য সুশাসিত করে থাকি। তাই আপনার থানাও নটারীর মাধ্যমে নির্বাচিত হয়েছে বিধায় আপনার থানাতে এসেছি।

Q. Is participation voluntary?

A. Although participation in the SRS is voluntary, it is very important that we obtain the cooperation of all households selected in this very small sample to ensure that valid and representative results can be produced. A simple Bangla variant of this theme is the following:

আমাদের নমুনা জরীয়ে আপনার অংশগ্রহণ আপনার ইচ্ছা ও সহযোগীতার উপর নির্ভরশীল। কিন্তু সূক্ষ্ম সংখ্যক খানার তিষ্ঠিতে প্রনীত এ জরীয়ে আপনার অংশ গ্রহণ আমাদের জন্য অত্যন্ত দরকার। তাই আপনার অংশ গ্রহণ সূক্ষ্ম সম্পর্কিত নীতি মানার বর্তমান পদ্ধতির তানয়ন দিক বের করতে ও প্রত্যেক নাগরিক এর সুসূক্ষ্ম গঠনে নীতিমান প্রনয়নে সাহায্য করবে।

Q. Why are you back again?

A. In order to measure the effectiveness of the current health and family planning services in the area, it is necessary to make quarterly visits and conduct interviews at each of the sample households. We would have no way of knowing what changes have occurred without revisiting each sample household and conducting our interviews.

"কারণ সাময়িক্যপূর্ণ তথ্য সংগ্রহের জন্যই আমরা প্রতি তিন মাস অনুর অনুর আপনার থানাতে আসব। আপনার সূক্ষ্ম ও পরিবার পরিকল্পনা সম্পর্কে পূর্ববর্তী বিভিন্ন খবরাদি আমরা জানি। গত তিন মাসের মধ্যে এ সম্পর্কে আরো নতুন তথ্যাদি আপনার থানাতে সংযোজন হতে পারে বিধায় আমরা পুনরায় আসছি। বিচ্ছিন্নভাবে কিছু জানার চেষ্টা না করে একই থানা থেকে সূক্ষ্ম সম্পর্কিত তথ্যাদি জানলে তা নির্ভরযোগ্য ও সাময়িক্যপূর্ণ হয়ে থাকে। তাই আপনার থানাতে তিন মাস অনুর অনুর আমরা এসে থাকি"।

Q. How will this information be used?

A. The information gathered from the SRS will be used to evaluate the effectiveness of the current health and family planning services and will assist in the planning of new services.

এ সমস্ত তথ্যাদি বাংলাদেশ সরকারের সুসংগঠিত নীতি প্রণয়নের জন্য ব্যবহার করা হবে।

Q. How is this system going to benefit me? Are you going to give me medicine?

A. Although it may be difficult to see how the results of the systems will benefit you directly, the information will be used by the government to establish policies relating to the provision of health services. MOHPC will be able to use the results to help evaluate programs that are designed to provide health care and suitable living conditions for every Bangladeshi family.

A simple to understand Bangla response is:

উদ্বিগ্ন সরকার কর্তৃক প্রণীত সুসংগঠিত নীতি মানায় আমাদের সুপারিশগুলো বিবেচনা করা হবে বলে আমরা আশা রাখি। আপনার এ সহযোগিতা আপনার ছেলে মেয়েদের সুসংগঠিত ও উদ্বিগ্ন গড়ার কাজে সাহায্য হবে এবং এভাবেই আমাদের এ কাজ আপনার উপকারে আসবে।

Your Role as an Interviewer

You play two roles as an interviewer

- that of a technician who applies standard techniques to each interview, and
- that of a person who builds a harmonious and business like relationship with each respondent.

How to Maintain Rapport

You should begin to build a harmonious relationship with the respondents from the initial contact and maintain rapport throughout the interview to ensure full and valid information.

How to Probe

You may need to probe in order to clarify or even obtain an answer from a respondent. The probing procedures below are useful in stimulating discussion. These devices should be introduced casually in a natural expression of interest.

1. Brief assenting comments, such as "yes, I see" show the respondent that you are giving your attention to the answer and often stimulates the respondent to talk further.
2. An expectant pause, accompanied by an enquiring look after the respondent has given only a brief reply, is often enough to convey to the respondent the impression that he/she has merely begun to provide the information and it will often bring forth further response.
3. The "I don't know" answer, respondents do not always mean what they first say and further probing often presents a clearer picture of their thoughts. For example, "I don't know" might mean -
 - the respondent does not understand the question and answers "I don't know" to avoid saying that he/she did not understand.
 - the respondent is thinking and says "I don't know" as a tentative idea to give him/her time to think.
 - the respondent may be trying to evade the issue
 - the respondent may genuinely not know.

Care should be exercised in the use of neutral probes so that you do not influence the respondent's answer or unnecessarily prolong the interview.

Closing the Interview

After you have completed an interview, leave the respondent with a friendly feeling toward you and the ICDDR,B, so that the way is clear for your contact in the next and subsequent rounds. Thank the respondent(s) for their cooperation. This is a multiround study and the respondent should know that you or someone else from the ICDDR,B will be coming back.

SECTION 5: INTERVIEWING GUIDE

General

It is your responsibility to determine the incidence and nature of demographic and vital events which have occurred during the reference period within your selected households. As the SRS does not have a structured questionnaire it is extremely important that you become thoroughly familiar with these instructions and all the associated report forms which will be used during the conduct of the SRS. It is essential that all interviewers cover all events so that the results of the SRS will be comparable, reliable and accurate.

Sequence Guides

Thre sequence guides have been developed to assist you in the collection of the relevant data. Obviously it will not always be possible to strictly adhere to the order of topics as they occur on the sequence guides. However, you must ensure that all topics for which information is required are raised with the respondents, regardless of what order is used.

You will probably find that the occurrence of most events will become evident in the initial part of the interview when checking on the current household composition. Although it may be possible to update the HRB at that stage, you may also need to interview the person who was directly involved in the event in order to obtain adequate and reliable details for completion of the relevant event forms. This may be of particular need in the case of in-migrants, pregnancy terminations, etc.

Household Composition

The following sets out the sequence of checks to be made in order to determine the current household composition.

(a) Check names of usual residents and record in HRB their presence/absence **IE EXTRA PERSONS are present**

- (i) Ascertain if they were omitted in error (which necessitates filling in an Amendment Report Form)
- (ii) Ascertain if new usual residents (new born or In-Migration Report form required) are present

(b) Check personal details for correctness

- (iii) Update HRB as required
- (iv) Complete the relevant report form for submission to Dhaka

IF ANY CHANGES are required:

- (i) Ascertain if HRB entries are recorded in error
- (ii) Ascertain if result of event
- (iii) Check the type of event and the date on which it occurred
- (iv) Update HRB
- (v) Complete relevant report forms.

or

IF MISSING PERSONS

- (i) Ascertain if included in error (complete an Amendment Report Form)
- (ii) Ascertain if person migrated out/died
- (iii) Update HRB
- (iv) Complete relevant report forms.

Events

Once you have obtained an up-to-date status of the household you must check whether the information is complete by asking a series of questions to ascertain the occurrence of events during the reference period. These questions may sound repetitive but it is important that you ensure that full details are provided.

The following sequence guide sets out a series of questions which you may ask in order to collect the information on events. You may need to prefix each of these questions with something along the following lines:

"In addition to the ----- already mentioned I
(event)
would like to check whether there have been any other
-----" (as per sequence guide) see below.

These questions refer only to those persons who are usual residents of the selected household.

- a) Has any person(s) moved into this household from another household during the last 3 months?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (b)

- b) Has any person(s) changed their marital status as a result of marriage, reunion, divorce, widowhood or separation during the last 3 months?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (c)

- c) Has any woman given birth to a child, even if still born during the last 3 months?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (d)

- d) Has any woman suffered a miscarriage during the last 3 months?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (e)

e) Has any member(s) moved away from this household during the last 3 months?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (f)

f) Have there been any deaths of household members during the last 3 months/since last visit?

Yes -- Obtain details, update HRB and complete report form

No -- Go to (g)

In order that reliable information is obtained you must always try to interview persons who are knowledgeable about the occurrence of events and whether possible you should interview the individual concerned.

For each event in a)f) above you must enter a code in the HRB immediately. Do not fill a form until you have entered information in the HRB. Don not write in the HRB until the following is checked:

- a) If relationships in the HRB are correct.
- b) If the in-migrant was already a member which is invalid
- c) If individuals are members, otherwise their Marital Status Change can not be recorded and reported.
- d) If women are members, otherwise PT resulting in any mode is invalid.
- e) If mothers are members, otherwise pregnancy termination is invalid.
- f) If the out-migration was a member, otherwise it can not be recoded.
- g) If the deceased was a member, otherwise it can not be recorded.

You must not mechanically record events and expect respondents to understand our definition of household members. Every event recorded must be consistent with our definition.

The HRB is described in Section 7.ii.

Pregnancy Status

A third sequence guide has been designed to assist you in determining the pregnancy status of all currently married women of reproductive age, that is currently married women who are less than 50 years of age. The question must be asked only on usual residents.

You are required to identify those currently pregnant women and record the approximate date of conception in the note column of HRB. Where you ascertain that a woman is pregnant, you must make specific checks at each subsequent interview on the outcome of that pregnancy and complete the necessary details.

If a reported pregnancy is determined to be false in a subsequent interviewing round you must make the appropriate entry i.e. PR for the current of the HRB and record the approximate date it was realised. you must ensure that such reportings or a direct result of a false pregnancy and not the result of pregnancy terminations.

Once you have ascertained age and marital status from the HRB the following questions will assist you to determine pregnancy status:

a) How many weeks ago did your last menses occur?

If more than 5 weeks ago

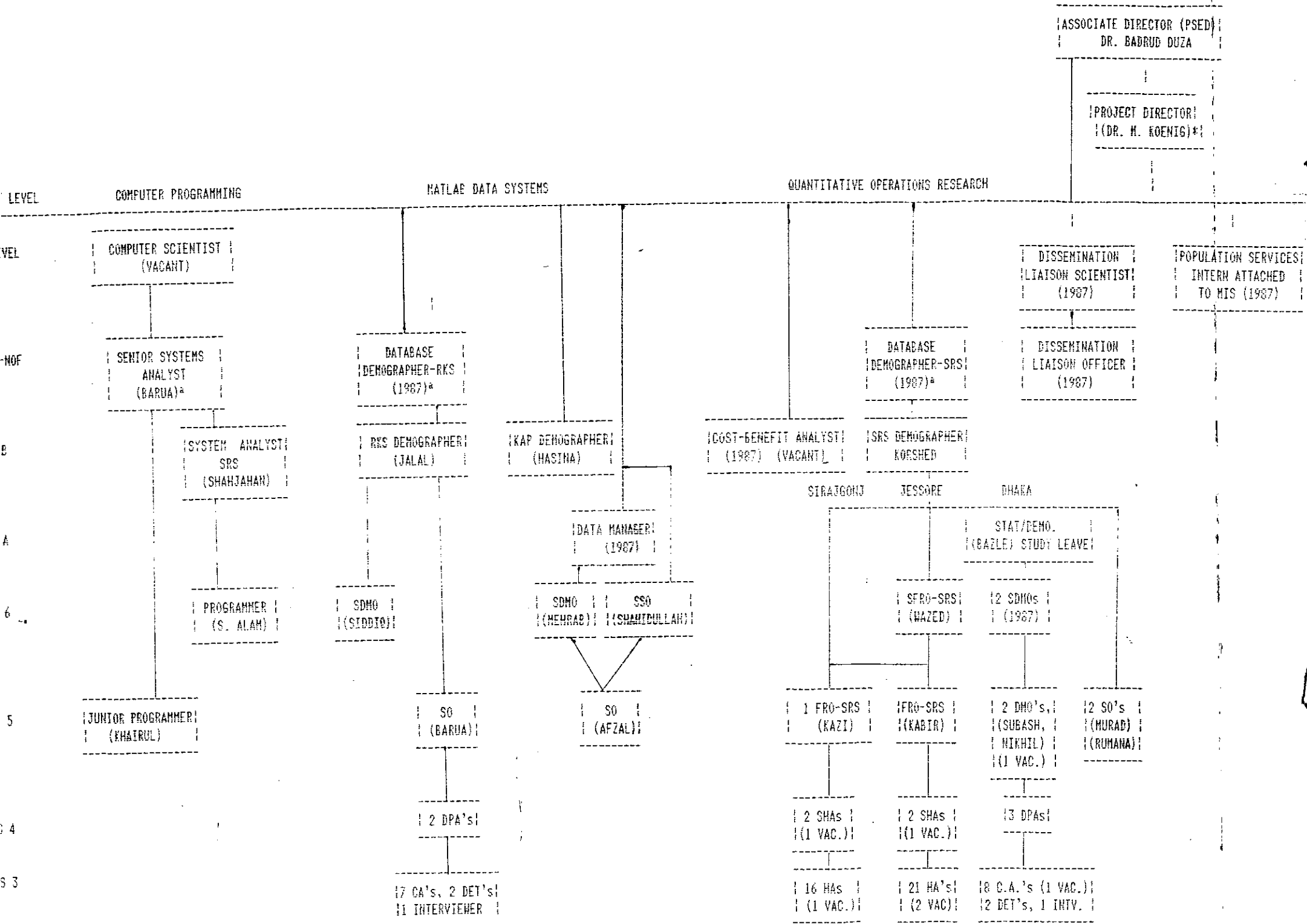
b) For what reason do you think your menses has not occurred?

If possibly pregnant

c) Are you pregnant at present?

Yes -- obtain details, update HRB.

It may be useful to clip a copy of each sequence guide inside your HRB so that you may refer to them during your interviews.



SECTION III: BUDGET

A. SUMMARY BUDGET

ICDDR,B

1987 BUDGET PROPOSAL (IN US \$)

MCH-FP EXTENSION PROJECT: SUMMARY BUDGET

A/C Code	Description	Refer Page No.	40 01 11 Liaison Activities	40 03 11 MCH-FP Dhaka	40 03 21 MCH-FP Sirajgonj	40 03 31 MCH-FP Abhoynagar	40 03 41 Matlab Research	40 03 71 Ntl FWA Recr. Scheme	TOTAL
3100	Local Salaries	2	11,382	144,244	73,462	89,520	71,292	59,902	449,802
3200	Intl. Salaries	8	58,500	77,010	0	0	0	0	135,510
3300	Consultants	14	0	25,493	0	0	0	0	25,493
3500	Travel Local	15	150	16,000	9,000	9,000	2,500	13,800	50,450
3600	Travel Intl.	16	0	40,000	0	0	0	0	40,000
3700	Supplies & Materials	17&18	2,400	21,000	9,790	10,490	1,150	2,000	46,830
4800	Other Costs	19	21,450	30,700	12,200	12,200	0	8,200	84,750
3900	Inter Deptl. Serv.	20	400	45,000	1,000	1,000	45,500	1,200	94,100
Total Direct Operating Cost			94,282	399,447	105,452	122,210	120,442	85,102	926,935
0300	Capital Expenditure	21	6,600	28,300	2,000	2,000	0	20,710	59,610
TOTAL DIRECT COST			100,882	427,747	107,452	124,210	120,442	105,812	986,545
INDIRECT COST (31%) EXCEPT									
CAPITAL EXPENDITURE OR EQUIPMENT			29,227	123,829	32,690	37,885	37,337	26,382	287,350
GRAND TOTAL			130,109	551,576	140,142	162,095	157,779	132,194	1,273,895

Prepared on: 15.06.87

SECTION III: BUDGET
 B. DETAILED BUDGET: 1. LIAISON ACTIVITIES
 (Dr. Duza's Office)

ICDDR,B
 1987 BUDGET PROPOSAL (IN US \$)

PAGE 1 OF 21

PROGRAMME NAME: POPULATION AND EXTENSION DIVISION
 PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXTENSION PROJECT, LIAISON ACTIVITIES
 PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG
 PROGRAMME HEAD: DR. BADRUD DUZA
 BUDGET CODE: 40 01 11
 ESTIMATED BEGINNING DATE: 01.07.87
 ESTIMATED ENDING DATE: 30.06.90
 PROTOCOL NO:

EXPENSE CATEGORY			Column A	Column B	Column C	Column D
A/C Code Description	Refer to Page No.	Project	Total Cost	Actual Jan- Sep '86	Estim. Whole Yr 1986	Proposed 1987
3100 Local Salaries	02					11,382
3200 Intl. Salaries	08					58,500
3300 Consultants	14					0
3500 Travel Local	15					150
3600 Travel Intl.	16					0
3700 Supplies & Mat.	17 & 18					2,400
3800 Other Costs	19					21,450
4800 Inter Deptl. Ser.	20					400
Total Direct Operating Cost			0	0	0	94,282
0300 Capital Expenditure (P.21)						6,600
TOTAL DIRECT COST			0	0	0	100,882

Prepared on: 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	1	0	6,132
Add: B. New Recruitments (Source: P.4)	2	0	5,250
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	3	0	11,382
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	3	0	11,382

		A	B	C	D	E	F	G
Job Designation	Level	Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Month 1.1.87 (D X 12)	Rate Per Month (E X F)	\$ Amount (E X F)
1. Proj. Off. Manager	NO-A	1	0	0	1	12	511	6,132
TOTAL		0	1	0	0	1		6,132

Job Designation	Level	Start Date	No. of positns	No. of Man-Mnths	Rate Per Month	\$ Amount
1. Dissemination Scientist/Sr. Liaison Researcher	NO-C	01.07.87	1	6	710	4,260
2. Secretarial/Admn Assistant	IV	01.07.87	1	6	165	990
TOTAL			2			5,250

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: p.9)	1	0	58,500
Add:			
B. New Recruitments (Source: P.10)	0	0	0
C. Staff allocated from other area (Source: P11)	0	0	0
Sub Total (i)	1	0	58,500
Less:			
D. Separations (Source: P.12)	0	0	0
E. Staff allocated to other area (Source: P.13)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	1	0	58,500

		A	B	C	D	E	F	G
Job Designation	Level	Posi-	New Recr	Separa-	Posi-	Man	Rate	
		tions	Oct-Dec	tions	tions	Months	Per	\$
		30.09.86	1986 09-12/86	1.1.87	1.1.87	Month	Month	Amount
		(+)	(-)	(A+B-C)	(D X 12)	(E X 12)	(E X F)	
1. Associate Director--Liaison PSED	P-5/6	1	0	0	1	12	4,875	58,500
TOTAL		1	0	0	1			58,500

Job Designation	Purpose of Travel	Travel From To	No. of Persn	Estim. Days/PP	Tr Person Days (A)	Per Diem		Transport		Other Cost (F)	Total \$ Amount (C+D+E+F)
						Rate (B)	Amount (C=AXB)	Air (D)	Ground (E)		
1. Lump Sum	Visit to field sites						0				150
TOTAL							0				150

A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	500
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	0
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	0
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	100
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	0
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	0
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	1,800
Sub Total		2,400
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		2,400

A/C Code	Item Description	\$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	0
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	0
4100	Bank charges	0
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	0
4300	Printing and Publication (Printing of forms, books, journals, reprints etc.)	21,450
4400	Costs associated with business meetings/ conferences/workshops/seminars etc.	0
4500	Service Charges (hiring daily wagers/ labourers etc.)	0
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistence paid to the staff)	0
TOTAL		21,450

A/C Code	Service Area	\$ Amount
4801	Computer	0
4802	Transport Dhaka	100
4803	Transport Matlab	150
4804	Water Transport Matlab	100
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	50
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	0
TOTAL		400

Item Description	Manufacturer	No. of Units	CIF \$ Amount
1. Dictaphone (pocket memo etc.)			500
2. COMPAQ Portable II PC with peripherals & Software		1	5,000
3. EPSON Printer		1	1,100
TOTAL			6,600

SECTION III: BUDGET
B. DETAILED BUDGET: 2. MCH-FP/DHAKA

ICDDR,B

1987 BUDGET PROPOSAL (IN US \$)

PROGRAMME NAME: POPULATION AND EXTENSION DIVISION

PAGE 1 OF 21

PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXTENSION PROJECT, DHAKA

PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG

PROGRAMME HEAD: DR. BADRUD DUZA

BUDGET CODE: 40 03 11

ESTIMATED BEGINNING DATE: 01.07.87

PROTOCOL NO:

ESTIMATED ENDING DATE: 30.06.90

EXPENSE CATEGORY		Column A	Column B	Column C	Column D
A/C Code Description	Refer to Page No.	Total Project Cost	Actual Jan-Sep '86	Estim. Whole Yr 1986	Proposed 1987
3100 Local Salaries	02				144,244
3200 Intl. Salaries	08				77,010
3300 Consultants	14				25,493
3500 Travel Local	15				16,000
3600 Travel Intl.	16				40,000
3700 Supplies & Mat.	17 & 18				21,000
3800 Other Costs	19				30,700
4800 Inter Deptl. Ser.	20				45,000
Total Direct Operating Cost		0	0	0	399,447
0300 Capital Expenditure (P.21)					28,300
TOTAL DIRECT COST		0	0	0	427,747

Prepared on 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	43	0	126,748
Add:			
B. New Recruitments (Source: P.4)	8	0	17,496
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	51	0	144,244
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	51	0	144,244

Job Designation	Level	A	B	C	D	E	F	G
		Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Month 1.1.87 (D X 12)	Rate Per Month (E X F)	\$ Amount (E X F)
SAMPLE REGISTRATION SYSTEM (SRS)								
1. Sr. Data Base Demographer	NO-C	1	0	0	1	12	710	8,520
2. Analyst Programmer	NO-B	1	0	0	1	12	454	5,448
3. Sr. Data Mngt. Officer	VI	2	0	0	2	24	297	7,128
4. Programmer	VI	1	0	0	1	12	239	2,868
5. Statistical Officer/SRS	V	2	0	0	2	24	230	5,520
7. Data Processing Assistant	IV	2	0	0	2	24	175	4,200
8. Data Processing Assistant	IV	1	0	0	1	12	165	1,980
9. Coding Assistant	III	2	0	0	2	24	156	3,744
10. Coding Assistant	III	6	0	0	6	72	141	10,152
11. Coding Assistant	III	1	0	0	1	12	132	1,584
12. Data Entry Tech. Gr I	IV	1	0	0	1	12	164	1,968
13. Data Entry Tech, Gr 2	III	1	0	0	1	12	109	1,308
14. Interviewer/SRS	III	1	0	0	1	12	141	1,692
INTERVENTION AND TRAINING								
16. Sr. Medical Officer	NO-B	1	0	0	1	12	450	5,400
OPERATIONS RESEARCH								
17. Sr. Operations Researcher	NO-B	3	0	0	3	36	549	19,764
18. Operations Researcher	VI	1	0	0	1	12	312	3,744
19. Jr Operations Researcher	V	0	1	0	1	12	220	2,640
ADMINISTRATIVE SUPPORT								
20. Project Office Manager	NO-A	1	0	0	1	12	522	6,264
21. Senior Secretary	VI	2	0	0	2	24	303	7,272
22. Junior Secretary	V	3	1	0	4	48	228	10,944
23. Admin/Coordination Officer	V	1	0	0	1	12	220	2,640
24. Clerk, Gr. I	III	2	0	0	2	24	134	3,216
25. Driver, Auto	II	1	0	0	1	12	138	1,656
26. Jr. Xerox Operator	I	1	0	0	1	12	111	1,332
27. Messenger	I	2	0	0	2	24	101	2,424
28. Office Attendant	I	1	0	0	1	12	95	1,140
29. Overtime Allowance								2,200
TOTAL								
		41	2	0	43			126,748

Job Designation	Level	Start Date	No. of positions	No. of Man-Mths	Rate Per Month	\$ Amount
SAMPLE REGISTRATION SYSTEM (SRS)						
1. Statistician-Demographer	NO-A	01.01.87	1	6	410	2,460
2. Data Management Officer	V	01.01.87	1	6	230	1,380
3. Statistical Officer	V	01.01.87	1	6	230	1,380
4. Coding Assistant	III	01.01.87	1	6	132	792
INTERVENTION & TRAINING						
5. Field Coordinator	NO-C/D	01.01.87	1	6	800	4,800
OPERATIONS RESEARCH						
6. Cost Effective Analyst	NO-B	01.01.87	1	6	500	3,000
ADMINISTRATIVE SUPPORT						
7. Sr. Accounts Officer	NO-A	01.01.87	1	6	480	2,880
8. Clerk, Grade I	III	01.01.87	1	6	134	804
TOTAL			8			17,496

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: p.9)	2	0	77,010
Add:			
B. New Recruitments (Source: P.10)	0	0	0
C. Staff allocated from other area (Source: P11)	0	0	0
Sub Total (i)	2	0	77,010
Less:			
D. Separations (Source: P.12)	0	0	0
E. Staff allocated to other area (Source: P.13)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	2	0	77,010

Job Designation	Level	A	B	C	D	E	F	G
		Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Months 1.1.87 (D X 12)	Rate Per Month (E X F)	\$ Amount (E X F)
1. Computer Scientist	P-3/6	1	0	0	1	8	5,200	41,600
2. Op Res Scientist (Consultan	P-5	1	0	0	1	5.5		35,410
TOTAL		2			2			77,010

Job Designation	Travel From-To-To	No. of Days	Per Diem Rate	Per Diem Total	Honorarium Rate	Honorarium Total	Travel Cost	Total \$ Amount
1. Lump Sum				0		0		25,493
2.				0		0		0
3.				0		0		0
4.				0		0		0
5.				0		0		0
6.				0		0		0
7.				0		0		0
8.				0		0		0
9.				0		0		0
10.				0		0		0
11.				0		0		0
12.				0		0		0
13.				0		0		0
13.				0		0		0
14.				0		0		0
15.				0		0		0
16.				0		0		0
17.				0		0		0
17.				0		0		0
18.				0		0		0
19.				0		0		0
20.				0		0		0
TOTAL				0		0		25,493

Job Designation	Purpose of Travel	Travel From To-To	No. of Persn	Estim. Days/PP	Tr Person Days (A)	Per Diem		Transport		Other Cost (F)	Total \$ Amount (C+D+E+F)
						Rate (B)	Amount (C=AXB)	Air (D)	Ground (E)		
1. Lump Sum	Visit to field sites						0				16,000
TOTAL							0				16,000

Job Designation	Purpose of Travel	Travel From-To-To	Est.Tr. Days (A)	Per Diem		Transportation		Other Cost (F)	Total \$ Amount (C+D+E+F)
				Rate (B)	Amount (C = AXB)	Air (D)	Ground (E)		
1. Lump Sum	To participate in Conferences/workshops etc.				0				40,000
TOTAL					0				40,000

SUPPLIES AND MATERIALS - 1987

PAGE 17 & 18
OF 21

A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Office Supplies and training materials	14,700
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	200
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	1,000
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	550
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	300
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	1,000
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	3,250
Sub Total		21,000
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		21,000

A/C Code	Item Description	\$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	11,000
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	2,200
4100	Bank charges	0
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	0
4300	Printing and Publication (Printing of forms, books, journals, reprints, newsletter printing and dissemination and binding & illustrations)	3,100
4400	Costs associated with business meetings/ conferences/workshops/seminars etc.	900
4500	Service Charges (hiring daily wagers/labourers etc.)	1,000
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistence paid to the staff)	12,500
TOTAL		30,700

A/C Code	Service Area	\$ Amount
4801	Computer	40,000
4802	Transport Dhaka	1,300
4803	Transport Matlab	200
4804	Water Transport Matlab	2,000
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	1,000
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	500
TOTAL		45,000

Item Description	Manufacturer	No. of Units	CIF \$ Amount
1. Office Furniture			3,300
2. Xerox machine		1	6,500
3. COMPAQ Portable II PC with peripherals & software		1	5,000
4. Letter Quality Laser Printer		1	3,000
5. Air Cooler		5	3,500
6. Miscellaneous			1,000
7. UPS (1) and Voltage Stabilizer (2)			6,000
TOTAL			28,300

SECTION III: BUDGET
B. DETAILED BUDGET: 3. MCH-FP/SIRAJGONJ

TCDDR,8

1987 BUDGET PROPOSAL (IN US \$)

PAGE 1 OF 21

PROGRAMME NAME: POPULATION AND EXTENSION DIVISION
PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXTENSION PROJECT, SIRAJGONJ
PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG
PROGRAMME HEAD: DR. BADRUD DUZA
BUDGET CODE: 40 03 21
ESTIMATED BEGINNING DATE: 01.07.87
PROTOCOL NO: ESTIMATED ENDING DATE: 30.06.90

EXPENSE CATEGORY		Column A	Column B	Column C	Column D
A/C	Refer to	Total	Actual Jan-	Estim. Whole	Proposed
Code Description	Page No. Project Cost		Sep '86	Yr 1986	1987
3100 Local Salaries	02				73,462
3200 Intl. Salaries	08				0
3300 Consultants	14				0
3500 Travel Local	15				9,000
3600 Travel Intl.	16				0
3700 Supplies & Mat.	17 & 18				9,790
3800 Other Costs	19				12,200
4800 Inter Deptl. Ser.	20				1,000
Total Direct Operating Cost		0	0	0	105,452
0300 Capital Expenditure (P.21)					2,000
TOTAL DIRECT COST		0	0	0	107,452

Prepared on 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	32	0	67,196
Add:			
B. New Recruitments (Source: P.4)	6	0	6,266
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	38	0	73,462
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	38	0	73,462

		A	B	C	D	E	F	G
Job Designation	Level	Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Month 1.1.87 (D X 12)	Rate Per Month (E X F)	\$ Amount (E X F)
OPERATIONS RESEARCH								
1. Field Research Manager	NO-A	1	0	0	1	12	410	4,920
2. Sr. Health Assistant	IV	2	0	0	2	24	210	5,040
INTERVENTION & TRAINING								
3. Medical Officer	NO-A	1	0	0	1	12	410	4,920
4. Field Res. Officer	V	1	0	0	1	12	220	2,640
5. Lady Health Visitor/LFPV	V	2	0	0	2	24	196	4,692
SRS/DEMOGRAPHIC SURVEILLANCE								
6. Field Res. Officer	V	1	0	0	1	12	319	3,828
7. Sr. Health Asstt.	IV	1	0	0	1	12	167	2,004
8. Health Assistant	III	1	0	0	1	12	154	1,848
9. Interviewer	III	13	0	0	13	156	142	22,152
ADMINISTRATIVE SUPPORT								
10. Administrative Assistant	IV	1	0	0	1	12	190	2,280
11. Driver , Auto	II	1	0	0	1	12	158	1,896
12. Cleaner	I	1	0	0	1	12	128	1,536
13. Security Guard	I	3	0	0	3	36	111	3,996
14. Cook for Guest House	I	1	0	0	1	12	99	1,188
15. Attendant for Guest House	I	1	0	0	1	12	86	1,032
16. Security Guard for GH	I	1	0	0	1	12	102	1,224
17. Overtime allowance								2,000
TOTAL		32			32			67,196

Job Designation	Level	Start Date	No. of positns	No. of Man-Mths	Rate Per Month	\$ Amount
INTERVENTION AND TRAINING						
1. Community Organizer		01.07.87	1	6	220	1,320
2. Nurse Tutor		01.07.87	1	6	220	1,320
SRS/DEMOGRAPHIC SURVEILLANCE						
3. Senior Health Assistant	IV	01.07.87	1	6	167	1,002
4. Health Assistant	III	01.07.87	1	6	154	924
5. Interviewer	III	01.07.87	1	5	142	710
ADMINISTRATIVE SUPPORT						
5. Clerk, Grade II	II	01.07.87	1	9	110	990
TOTAL			6		6,266	

Job Designation	Purpose of Travel	Travel From To	No. of Persn	Estim. Tr Days/PP	Person Days (A)	Per Diem		Transport		Other Cost (F)	Total \$ Amount (C+D+E+F)
						Rate (B)	Amount (C=AXB)	Air (D)	Ground (E)		
1. Lump Sum	Visit to field sites						0				9,000
TOTAL							0				9,000

SUPPLIES AND MATERIALS - 1987

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OF 21

A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	1,300
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	200
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	4,400
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	400
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	400
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	2,090
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	1,000
Sub Total		9,790
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		9,790

A/C Code	Item Description	\$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	1,500
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	4,000
4100	Bank charges	0
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	0
4300	Printing and Publication (Printing of forms, books, journals, reprints etc.)	1,000
4400	Costs associated with business conferences/ workshops/seminars etc. food, lunch, refreshment etc.)	4,200
4500	Service Charges (hiring daily wagers/labourer (For general and EPI Programme: CHW (1); MLSS (6))	1,500
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistence paid to the staff)	0
TOTAL		12,200

A/C Code	Service Area	\$ Amount
4801	Computer	0
4802	Transport Dhaka	1,000
4803	Transport Matlab	0
4804	Water Transport Matlab	0
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	0
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	0
TOTAL		1,000

CAPITAL EXPENDITURE - 1987

PAGE 21 OF 21

Item Description	Manufacturer	No. of Units	CIF \$ Amount
1. Office Furniture			2,000
TOTAL			2,000

SECTION III: BUDGET
8. DETAILED BUDGET: 4. MCH-FP/NOAPARA (ABHOYNAGAR)

ICDDR,B
1987 BUDGET PROPOSAL (IN US \$)

PAGE 1 OF 21

PROGRAMME NAME: POPULATION AND EXTENSION DIVISION
PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXTENSION PROJECT, NOAPARA
PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG
PROGRAMME HEAD: DR. BADRUD DUZA
BUDGET CODE: 40 03 31
ESTIMATED BEGINNING DATE: 01.07.87
ESTIMATED ENDING DATE: 30.06.90
PROTOCOL NO:

EXPENSE CATEGORY		Column A	Column B	Column C	Column D
A/C Code Description	Refer to Page No.	Total Project Cost	Actual Jan-Sep '86	Estim. Whole Yr 1986	Proposed 1987
3100 Local Salaries	02				89,520
3200 Intl. Salaries	08				0
3300 Consultants	14				0
3500 Travel Local	15				9,000
3600 Travel Intl.	16				0
3700 Supplies & Mat.	17 & 18				10,490
3800 Other Costs	19				12,200
4800 Inter Deptl. Ser.	20				1,000
Total Direct Operating Cost		0	0	0	122,210
0300 Capital Expenditure (P.21)					2,000
TOTAL DIRECT COST		0	0	0	124,210

Prepared on: 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	42	0	87,530
Add:			
B. New Recruitments (Source: P.4)	3	0	1,990
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	45	0	89,520
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	45	0	89,520

Job Designation	Level	A	B	C	D	E	F	G
		Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Month 1.1.87 (D X 12)	Rate Per Month (E X 12)	\$ Amount (F X F)
OPERATIONS RESEARCH								
1. Field Research Manager	NO-A	1	0	0	1	12	410	4,920
2. Sr. Health Assistant	IV	2	0	0	2	24	198	4,752
INTERVENTION & TRAINING								
3. Medical Officer	NO-A	1	0	0	1	12	393	4,716
4. Field Res. Officer	V	1	0	0	1	12	334	4,008
5. Community Organizer	V	1	0	0	1	12	220	2,640
6. Nurse Tutor	V	1	0	0	1	12	340	4,080
7. Lady Health Visitor/LFPV	IV	2	0	0	2	24	214	5,136
SRS/DEMOGRAPHIC SURVEILLANCE								
8. SFRO/SRS	VI	1	0	0	1	10	297	2,970
9. Field Research Officer	V	1	0	0	1	12	232	2,784
10. Senior Health Assistant	IV	1	0	0	1	12	165	1,980
11. Health Assistant	III	3	0	0	3	36	155	5,580
12. Interviewer	III	7	0	0	7	84	146	12,264
13. Interviewer	III	3	0	0	3	30	131	3,930
14. Interviewer	III	6	0	0	6	72	125	9,000
15. Messenger-cum-Attendant for Camp Offices	I	1	0	0	1	12	99	1,188
ADMINISTRATIVE SUPPORT								
16. Administrative Assistant	IV	1	0	0	1	12	231	2,772
17. Clerk, Gr. II	II	1	0	0	1	12	110	1,320
18. Driver , Auto	II	1	0	0	1	12	133	1,596
19. Cleaner	I	1	0	0	1	12	132	1,584
20. Security Guard	I	3	0	0	3	36	110	3,960
21. Cook for Guest House	I	1	0	0	1	12	117	1,404
22. Attendant for GH	I	1	0	0	1	12	96	1,152
23. Security Guard for GH	I	1	0	0	1	12	87	1,044
24. Overtime allowancwe								2,750
TOTAL		42			42			87,530

Job Designation	Level	Start Date	No. of positns	No. of Man-Mths	Rate Per Month	\$ Amount
SRS/DEMOGRAPHIC SURVEILLANCE						
1. Senior Health Assistant	IV	01.07.87	1	6	165	990
2. Interviewer	III	01.07.87	2	8	125	1,000
TOTAL			3			1,990

Job Designation	Purpose of Travel	Travel From To	No. of Persn	Estim. Tr Days/PP	Person Days (A)	Per Diem		Transport		Other Cost (F)	Total \$ Amount (C+D+E+F)
						Rate (B)	Amount (C=AXB)	Air (D)	Ground (E)		
1. Lump Sum	Visit to field sites						0				9,000
TOTAL							0				9,000

A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	1,000
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	200
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	4,840
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	400
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	400
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	1,980
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	1,670
Sub Total		10,490
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		10,490

A/C Code	Item Description	\$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	1,500
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	4,000
4100	Bank charges	0
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	0
4300	Printing and Publication (Printing of forms, books, journals, reprints etc.)	1,000
4400	Costs associated with business conferences/ workshops/seminars etc.	4,200
4500	Service Charges (hiring daily wagers/labourers: for general and EPI Programme: CWH (1) & NLSS (6))	1,500
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistence paid to the staff)	0
TOTAL		12,200

A/C Code	Service Area	\$ Amount
4801	Computer	0
4802	Transport Dhaka	1,000
4803	Transport Matlab	0
4804	Water Transport Matlab	0
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	0
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	0
TOTAL		1,000

Item Description	Manufacturer	No. of Units	CIF \$ Amount
1. Office Furniture			2,000
TOTAL			2,000

SECTION III: BUDGET
B. DETAILED BUDGET: 5. MATLAB RESEARCH (RKS)

ICDDR,B
1987 BUDGET PROPOSAL (IN US \$)

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PROGRAMME NAME: POPULATION AND EXTENSION DIVISION
PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXTENSION PROJECT, MATLAB RESEARCH
PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG
PROGRAMME HEAD: DR. BADRUD DUZA
BUDGET CODE: 40 01 11
ESTIMATED BEGINNING DATE: 01.07.87
ESTIMATED ENDING DATE: 30.06.90
PROTOCOL NO:

EXPENSE CATEGORY			Column A	Column B	Column C	Column D
A/C Code Description	Refer to Page No.	Total Project Cost	Actual Jan-Sep '86	Estim. Whole Yr 1986	Proposed 1987	
3100 Local Salaries	02				71,292	
3200 Intl. Salaries	08				0	
3300 Consultants	14				0	
3500 Travel Local	15				2,500	
3600 Travel Intl.	16				0	
3700 Supplies & Mat.	17 & 18				1,150	
3800 Other Costs	19				0	
4800 Inter Deptl. Ser.	20				45,500	
Total Direct Operating Cost			0	0	0	120,442
0300 Capital Expenditure (P.21)						0
TOTAL DIRECT COST			0	0	0	120,442

Prepared on: 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	22	0	66,372
Add:			
B. New Recruitments (Source: P.4)	1	0	4,920
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	23	0	71,292
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	23	0	71,292

		A	B	C	D	E	F	G
Job Designation	Level	Posi-	New Recr	Separa-	Posi-	Man	Rate	
		tions	Oct-Dec	tions	tions	Month	Per	\$
		30.09.86	1986	09-12/86	1.1.87	1.1.87	Month	Amount
		(+)	(-)	(A+B-C)	(D X 12)	(E X 12)	(F X 12)	(G X F)
DHAKA								
1. Sr.Data Base Demographer	NO-C	1	0	0	1	12	710	8,520
2. Demographer	NO-B	1	0	0	1	12	527	6,324
3. Sr. Analyst Programmer	NO-C	1	0	0	1	12	710	8,520
5. Sr. Data Mngt Officer	VI	1	0	0	1	12	326	3,912
6. Statistician-Demographer	NO-A	1	0	0	1	12	410	4,920
7. Statistical Officer/RKS	V	1	0	0	2	24	221	5,304
8. Junior Programmer	V	1	0	0	1	12	197	2,364
9. Junior Secretary	V	1	0	0	1	12	232	2,784
10. Data Processing Assistant	IV	1	1	0	2	24	179	4,296
11. Coding Assistant	III	8	0	0	8	96	132	12,672
12. Interviewer	III	1	0	0	1	12	132	1,584
13. Data Entry Technician Gr I	IV	1	0	0	1	12	164	1,968
14. Data Entry Technician Gr 2	III	1	0	0	1	12	142	1,704
15. Overtime allowance								1,500
TOTAL		20	1		22			66,372

Job Designation	Level	Start Date	No. of positns	No. of Man-Mnths	Rate Per Month	\$ Amount
DHAKA						
1. Data Manager	MO-A	01.07.87	1	12	410	4,920
TOTAL			1			4,920

Job Designation	Purpose of Travel	Travel From To	No. of Persn	Estim. Tr Days/PP	Person Days	Per Diem		Transport		Other Cost	Total \$ Amount
						Rate (A)	Amount (B)	Air (C=AXB)	Ground (D)		
1. Lump Sum	Visit to field sites							0			2,500
TOTAL							0				2,500

A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	1,150
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	0
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	0
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	0
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	0
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	0
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	0
Sub Total		1,150
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		1,150

A/C Code	Service Area	\$ Amount
4801	Computer	40,000
4802	Transport Dhaka	1,000
4803	Transport Matlab	500
4804	Water Transport Matlab	3,000
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	0
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	1,000
TOTAL		45,500

SECTION III: BUDGET
B. DETAILED BUDGET: 6. NATIONAL FMA RECRUITMENT

ICDDR,B
1987 BUDGET PROPOSAL (IN US \$)

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PROGRAMME NAME: POPULATION AND EXTENSION DIVISION
PROJECT/PROTOCOL/BRANCH NAME: MCH-FP EXT PROJ--NATIONAL FMA RECRUITMENT SCHEME
PRINCIPAL INVESTIGATOR/BRANCH HEAD/PROJECT DIRECTOR: DR. MICHAEL A. KOENIG
PROGRAMME HEAD: DR. BADRUD DUZA
BUDGET CODE: 40 03 71
ESTIMATED BEGINNING DATE: 01.07.87
ESTIMATED ENDING DATE: 30.06.90
PROTOCOL NO:

EXPENSE CATEGORY			Column A	Column B	Column C	Column D
A/C Code	Description	Refer to Page No.	Total Project Cost	Actual Jan-Sep '86	Estim. Whole Yr 1986	Proposed 1987
3100	Local Salaries	02				59,902
3200	Intl. Salaries	08				0
3300	Consultants	14				0
3500	Travel Local	15				13,800
3600	Travel Intl.	16				0
3700	Supplies & Mat.	17 & 18				2,000
3800	Other Costs	19				8,200
4800	Inter Deptl. Ser.	20				1,200
Total Direct Operating Cost			0	0	0	85,102
0300	Capital Expenditure (P.21)					20,710
TOTAL DIRECT COST			0	0	0	105,812

Prepared on: 15.06.87

Description	No. of Positions	No. of Man Months	\$ Amount
A. Direct Project/Protocol/ Branch Staff at 01.01.1986 (Source: P.3)	14	0	56,788
Add:			
B. New Recruitments (Source: P.4)	3	0	3,114
C. Staff allocated from other area (Source: P.5)	0	0	
Sub Total (i)	17	0	59,902
Less:			
D. Separations (Source: P.6)	0	0	0
E. Staff allocated to other area (Source: P.7)	0	0	0
Sub Total (ii)	0	0	0
TOTAL (i - ii)	17	0	59,902

		A	B	C	D	E	F	G
Job Designation	Level	Posi- tions 30.09.86	New Recr Oct-Dec 1986 (+)	Separa- tions 09-12/86 (-)	Posi- tions 1.1.87 (A+B-C)	Man Month 1.1.87 (D X 12)	Rate Per Month (E X F)	\$ Amount (E X F)
DHAKA								
1. National FWA Recruitment Coordinator	NO-C	1	0	0	1	12	759	9,108
2. Senior Coordination Officer	VI	0	12	0	12	144	310	44,640
FIELD								
3. Coordination Officer	V	1	0	0	1	12	220	2,640
4. Overtime Allowances								400
TOTAL		2	12	0	14			56,788

Job Designation	Level	Start Date	No. of positns	No. of Man-Mths	Rate Per Month	\$ Amount
DHAKA						
1. Sr Coordination Offic	VI	01.07.87	1	6	310	1,860
1. Driver, Auto	II	01.07.87	1	6	110	660
2. Messenger/NLSS	I	01.07.87	1	6	99	594
TOTAL			3			3,114

Job Designation	Purpose of Travel	Travel From To	No. of Estm. Tr Persn	Days/PP	Person Days (A)	Per Diem Rate (B)	Per Diem Amount (C=AXB)	Transport Air (D)	Transport Ground (E)	Other Cost (F)	Total \$ Amount (C+D+E+F)
1. Lump Sum	Visit to field sites						0				13,800
TOTAL							0				13,800

SUPPLIES AND MATERIALS - 1987

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A/C Code	Item Description	\$ Amount
3701	Drugs (used for medication in the hospitals and field stations)	0
3702	Glassware (bottle, beaker, cylinder, petridish, aluminium seal, slides stopper, tube etc.)	0
3704	Stationery and Office Supplies (Battery, book register, binders, files, pencil, fastener, paper, ribbon, stapler etc.)	960
3705	Chemicals and Media (Acid, reagent, dextrose, sodium, bactoagar etc.)	0
3706	Materials for Uniform (Cloth, button etc required for making uniforms)	20
3707	Fuel, Oil and Lubricants (Diesel, mobil, petrol, kerosene etc.)	0
3708	Laboratory Supplies (Aluminium foil, bag, blade, brush, cap, container, film X-Ray etc.)	0
3709	Housekeeping Supplies (Aerosol, battery, wiping cloth, duster, lock and key etc.)	10
3710	Janitorial Supplies (Bleaching powder, brush, detol, detergent, insecticide, soap etc.)	10
3811	Tools and Spares (Automobile spares, tyres, tubes, battery, stores required for maintenance services etc.)	0
3712	Non-stock Supplies (Materials not normally kept in stock and purchased only against specific requisitions)	1,000
Sub Total		2,000
3713	Freight and other charges (Add 30% to above sub total)	0
TOTAL		2,000

A/C Code	Item Description	\$ Amount
3800	Repairs and Maintenance (Maintenance and repairs of vehicles, equipments, furniture and building)	650
3900	Rent, communication and utilities (Postage, telephone, telegram, electricity etc.)	0
4100	Bank charges	0
4200	Legal and Professional Expenses (Professional membership fee, legal fee, audit fee etc.)	0
4300	Printing and Publication (Printing of forms, books, journals, reprints etc.)	0
4400	Costs associated with the business meetings/ conferences/workshops/seminars etc.	6,700
4500	Service Charges (hiring daily wagers/labourers or contingencies for recruitment)	850
4600	Staff Development and Training (Training course fee, training materials, stipend, scholarship, subsistence paid to the staff)	0
TOTAL		8,200

A/C Code	Service Area	\$ Amount
4801	Computer	0
4802	Transport Dhaka	1,000
4803	Transport Matlab	0
4804	Water Transport Matlab	0
4805	Transport Teknaf	0
4806	Xerox and Mimeograph	0
4807	Pathology	0
4808	Microbiology Tests	0
4809	Biochemistry	0
4810	X-Ray	0
4811	I.V. Fluid	0
4812	Media	0
4813	Patient Hospitalization study	0
4814	Animal Research	0
4815	Medical Illustration	0
4817	Telex	0
4818	Out Patient Care	0
4830	Transport Subsidy	200
TOTAL		1,200