

ETHICAL REVIEW COMMITTEE, ICDDR,B.

Date _____

Principal Investigator Dr. M. Koblinsky

Application No. 85-025P

Title of Study Cost-Effectiveness

Analysis of the MCH-FP Programmes in
Matlab, Extension and Comparison Areas.

Trainee Investigator (if any) Ms. D. Balk

Supporting Agency (if Non-ICDDR,B) USAID

Project status:

- (X) New Study
() 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).

1. Source of Population: NA

- (a) Ill subjects Yes No
(b) Non-ill subjects Yes No
(c) Minors or persons under guardianship Yes No

2. 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

3. 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

4. Are subjects clearly informed about: NA

- (a) Nature and purposes of study Yes No
(b) Procedures to be followed including alternatives used Yes No
(c) Physical risks Yes No
(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: NA

- (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:

- NA Umbrella proposal - Initially submit an overview (all other requirements will be submitted with individual studies).
X Protocol (Required)
X Abstract Summary (Required)
NA 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)
NA Informed consent form for subjects
NA Informed consent form for parent or guardian
NA Procedure for maintaining confidentiality
NA 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.

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

MAK
Principal Investigator

DBalk
Trainee

Attachment 1a.

INFORMATION TO INCLUDE IN ABSTRACT SUMMARY

The Cttee will not consider any application which does not include an abstract summary. The abstract should summarize the purpose of the study, the methods and procedures to be used, by addressing each of the following items. If an item is not applicable, please note accordingly:

1. Describe the requirements for a subject population and explain the rationale for using in this population special groups such as children, or groups whose ability to give voluntary informed consent may be in question.
2. Describe and assess any potential risks - physical, psychological, social, legal or other - and assess the likelihood and seriousness of such risks. If methods of research create potential risks, describe other methods, if any, that were considered and why they will not be used.
3. Describe procedures for protecting against or minimizing potential risks and an assessment of their likely effectiveness.
4. Include a description of the methods for safeguarding confidentiality or protecting anonymity.
5. When there are potential risks to the subject, or the privacy of the individual may be involved, the investigator is required to obtain a signed informed consent statement from the subject. For minors, informed consent must be obtained from the authorized legal guardian or parent of the subject. Describe consent procedures to be followed including how and where informed consent will be obtained.
 - (a) If signed consent will not be obtained, explain why this requirement should be waived and provide an alternative procedure.
 - (b) If information is to be withheld from a subject, justify this course of action.
 - (c) If there is a potential risk to the subject or privacy of the individual is involved in any particular procedure include a statement in the consent form stating whether or not compensation and/or treatment will be available.
6. If study involves an interview, describe where and in what context the interview will take place. State approximate length of time required for the interview.
7. Assess the potential benefits to be gained by the individual subject as well as the benefits which may accrue to society in general as a result of the planned work. Indicate how the benefits outweigh the risks.
8. State if the activity requires the use of records (hospital, medical, birth, death or other), organs, tissues, body fluids, the fetus or the abortus.

The statement to the subject should include information specified in items 2, 3, 4, 5(c) and 7, as well as indicating the approximate time required for participation in the activity.

85-025P
29-7-85

DRAFT-2/BALK/24 July 1985

PROTOCOL - COST-EFFECTIVENESS ANALYSIS

B. SECTION-I: RESEARCH PROTOCOL

- (1) Title: Cost-Effectiveness Analysis of the MCH-FP Programmes in Matlab Treatment and Comparison Areas.
- (2) Principal Investigator: Marjorie Koblinsky, Ph.D.
- Co-Investigators: Deborah Balk, M.P.P.
Deborah DeGraff, M.A.
Yousuf Hasan, M.A.
Mafizur Rahman, M.A.
- Consultant: George Simmons, Ph.D.
- (3) Starting Date: August 1985
- (4) Completion Date: February 1986
- (5) Total Direct Cost: 1985 US\$1,042
- Sources of Funds: USAID
- (6) Scientific Program Head: Dr. M.G.M. Rowland

This pilot protocol has been approved by
the Community Services Research Working Group?
21 July 1985. M.G.M. Rowland

(7) Abstract Summary:

Family planning is a priority in Bangladesh. It is an integral part of maternal and child health/family planning (MCH-FP) package. Many non-governmental organizations (NGOs) are involved in MCH-FP activities in Bangladesh as is the government. Many MCH-FP programmes have been said to be very costly despite their necessary nature. This protocol outlines a Cost-Effectiveness Analysis (CEA) which examines the costs incurred in creating an unit of demographic change from specific MCH-FP programmes in Bangladesh. In specific, the study will examine the activities of the ICDDR,B's programme in Matlab. The purpose of the CEA is to identify the optimal level of least expense and greatest effectiveness for reducing population growth. The ultimate goal of a CEA is the estimation of a series of rates that provide information about the cost per unit of impact of different treatments and the way these costs change over time.

CEA utilizes a comparative ratio measuring the costs of an intervention per unit of impact from that intervention. This CEA will examine different ICDDR,B interventions in Matlab and the control group area. Within Matlab, it is desirable to compare "intensive" blocks A and C with "limited" blocks B and D; and to compare these both to the comparison area. The analysis is designed to incorporate several levels of costs from those associated with the basic programme interventions to those incurred in international research endeavors. Likewise, we hope to make a variety of output measures available, to maximize the potential sophistication of analysis both within the Matlab treatment area and in comparing Matlab to the control area.

On an academic note, the CEA is a desirable policy study for the ICDDR,B for it adds a new dimension to the analytical and scientific research currently being conducted. On the pragmatic side, the ICDDR,B can benefit from the CEA as a practical management tool. Because this exercise shall be both practically and intellectually stimulating, it appears to be a worthy pursuit.

The decision to pursue a pilot protocol in Matlab was made with the intention of developing a CEA methodology specific to Bangladesh and the ICDDR,B. We hope that lessons we learn in Matlab will lend themselves to furthering this sort of analysis in the MCH-FP Extension Areas as well as other MCH-FP programmes in Bangladesh.

(8) Reviews:

(i) Ethical Review Committee:_____

(ii) Director:_____

C. SECTION-II: RESEARCH PLAN

A. Introduction

1. Objective:

Cost-Effectiveness Analysis (CEA) is a decision making tool designed primarily to permit administrators to make the best use of scarce resources. It may also serve as a research tool to assist policy-makers and analysts in the understanding and amending of projects. Underlying the cost-effectiveness technique is the notion that policy makers should attempt to systematically shift resources from activities with a low return (i.e., those which are less efficient) to those with a high level return (i.e., those which are more efficient). For example, if a \$100 expenditure on Project A yields five new family planning "impact units" and a same expenditure on Project B yields ten new "units of impact", then, if maximizing family planning "units of impact" is the desired goal, administrators will be better off spending more money or putting resources into Project B. The cost per unit of impact is \$10 in Project B, while it is \$20 in Project A; assuming that the processes underlying the two projects can be extended to larger population, twice as many units of impact can be generated with a given level of expenditure in Project B type activities as with Project A.

Conceptually, the procedure seems rather simple, but most real world applications produce a great many difficulties. Because projects differ in size, location and complexity, comparison among them is possible only through the careful application of highly standardized procedures. Cost-effectiveness methods always involve comparisons. Another characteristic of CEA is that it always involves the use of ratios to make these comparisons. Comparisons are made by estimating the ratio of the costs of a programme to the impact of that program for the various methods of delivering services and achieving impact. Naturally, the costs and impact must be linked by an implied causality.

The purpose of the analysis is to estimate the costs associated with alternative ways of undertaking the same project or activity. Thus, in the case of the ICDDR,B'S MCH-FP Projects, in using CEA, we are attempting to compare the costs of delivering health/family planning services/interventions.

2. Background:

In 1977, the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) began a maternal and child health care/family planning project (MCH-FP) in its rural research area in Matlab upazila. The hypothesis underlying the project was that a latent demand for contraceptive services existed in this high fertility population, and if provided along with proper medical care for contraceptive side effects and complications, pregnancy, and infant and child morbidity, would effectively increase contraceptive prevalence, reduce fertility rates and improve maternal and child health. One striking measure of the success of the program is the contraceptive prevalence rate. Prior to 1977, the rate was less than ten percent of women of reproductive age; by December of 1984 it had risen to approximately forty-six percent. Given this type of evidence, few would argue about the effectiveness of this approach in rural Bangladesh. However, the issue of the feasibility of the project, from an economic point of view, for other areas of Bangladesh or other high fertility countries, remains unaddressed.

Although the intensity of resources used in the Matlab MCH-FP project calls its replicability into question, the costs of the project have not been systematically documented and analyzed, nor related to project outputs. It is the intent of this research project to document the costs incurred since the inception of the MCH-FP project in Matlab and derive a measure of cost-effectiveness which can be used to compare it to its comparison area, the national family planning programme or, at a later date, to other approaches such as the ICDDR,B MCH-FP Extension Project or another NGO MCH-FP programme.

Preliminary work on this analysis was conducted by Dr. George Simmons who established the methodology and framework for analysis. (See Documentation Note, "The Application of Cost-Effectiveness Analysis to the MCH-FP Extension Project; and Documentation Note 26, "Cost-Effectiveness Analysis of Matlab MCH-FP: Purpose and Study Design" for further detail on background information regarding this study.)

3. Rationale:

The pursuit of a cost-effectiveness analysis of MCH-FP programs in Bangladesh is multifaceted. The CEA serves as an effective tool at many levels of management, operations and research. The desire for effective family planning in a monetarily poor country such as Bangladesh is a costly endeavor. Nonetheless, successful family planning programmes are the goal of many NGOs, International Governmental Organizations (IGOs) and the Government of Bangladesh, alike. Identifying the costs of a project can be helpful to these agencies in many ways. On the management side, the CEA requires that costs can be identified and compartmentalized so that they may be analyzed. This process can be of value in the field as well as in an accounting office. On the operations side, the CEA identifies which operations occur and do not occur and which are more costly than others. The research component of the CEA is a vital one. Determining the cost effectiveness ratio of family planning programmes will contribute to the validity of experimental design, both theoretically and in practice. Furthermore, it is a valuable research exercise in and of itself.

CEA was carefully chosen as the mode of analysis over a similar study - Cost Benefit Analysis (CBA). "In principle, CEA and CBA are fundamentally the same technique, in that both are structured methods designed to assist a decision-maker in the allocation of resources. In actual practice, CBA attempts to measure all costs and benefits of a given process, and all expended resources, and values them in monetary terms; but only CEA compares such costs with outputs measured in non-monetary terms(1)."

There are several drawbacks to using CBA. First, the monetization of benefits in an MCH-FP programme has severe implications, such as: (1) deciding to put a monetary figure on averting human life (2) should this decision be made, one must project all the costs a potential birth would incur in his or her given life. The former is undesirable, the latter unfeasible. Second, while CBA and CEA employ the same tools for analysis, there exists one basic theoretical difference between the two methods. CEA examines alternative ways of undertaking a programme (e.g. MCH-FP programmes) which share a goal; CBA reviews different projects which may have different goals (e.g. comparing an MCH-FP programme with an urban development project to see which is a "more resourceful" development strategy). For this reason, in addition to the above mentioned ones, we deem CEA a more appropriate mode of analysis than CBA. It may be possible, however, to incorporate a CBA into some dimensions of the project. This may be reasonable at a future date.

One additional impetus behind the CEA is the stated goal of government of Bangladesh. In the Third Five Year Plan, the Population Control Wing of the Ministry of Health and Population Control has suggested a target Contraceptive Prevalence Rate of forty percent by 1989-90(2). This is the current prevalence rate of Matlab. The question remains, what might it take of the the government for other MCH-FP projects to achieve this rate? The CEA will begin to address this issue.

b. Specific Aims

To complete a comprehensive cost-effectiveness analysis of different MCH-FP interventions over time in Matlab treatment and the comparison areas, with the expectation of developing a methodology which will, in the future, allow for similar analyses in the Extension Project, government sector and NGOs, the specific goals, are as follows:

1. To identify all the costs of the MCH-FP activities in the specified areas.
2. To collect monthly data - for the input and output measures.
3. To convert all the data into constants. This calls for the adjusting of all costs figures into one year and standardizing the demographic data.
4. To prepare several output measures (i.e., services distributed and demographic indicators) in accordance to the different comparisons being made. The implications of this are that we may use two ratios: one which is available for all the observed areas but necessarily less sophisticated and another, including only some projects but which in much greater detail. Allowing for multiple ratios ought to maximize the usage of CEA.
5. To assess cost-effectiveness ratios not only across project types, but to examine areal disparities between Matlab intensive blocks A and C and non-intensive blocks B and D.
6. To utilize this analysis in the policy-making arena.
7. To support research initiatives directed to improving the understanding of the cost components of MCH-FP activities.

c. Methods of Procedure

The framework for analysis of CEA will be one of experimental design, as noted above, and subject to the standard tests of validity. The design requires analysis of several intervention types. For this reason, it is necessary to examine both Matlab Treatment and the Comparison Group areas. The data collection procedures will be similar in all of the areas. We will look at both monthly and yearly data.

- Inputs (Costs):

On the cost side, a standardized form has been developed to incorporate different projects' costs. (See annexure.) The CEA will require the use of a microcomputer spreadsheet, both for the organization and processing of the data. Since we are looking at the change in fertility behavior from MCH-FP programmes, it is as important to document the costs of the MCH activities as it is the FP ones.

Costs are measured by the resources that are given up in carrying out the activity. In general, costs can be measured by the amount of expenditure on a project, but the economic literature is replete with examples of situations where money expenditure may give a misleading measure of what has been given up in order to undertake a project. For instance, we plan to follow the example of most of the health and family planning literature by ignoring such divergences between the true opportunity cost and the expenditure except for the most obvious and important examples. Contraceptive costs, donated building space, or a partially subsidized immunization programme are such examples. That is, contraceptives may not have any money costs for the project, but there should still be some costs attributed to them in the analysis. This is also important in any consideration of the economic feasibility of replicating the Matlab intervention.

The basic steps in estimating costs will be as follows:

1. Make a list of the resources used in the project during a given time period: different kinds of staff working with clients, administrative staff, buildings, transportation, contraceptives, etc. These costs should correspond to the three categories ("concentric rings") discussed below. Some costs such as those relating to research or to senior supervisors may not correspond to particular locality and may need to be allocated on a proportional basis.

2. Estimate the total number of person/days or the amount of each input that is used. This step may require a separate work sheet.
3. Find out the cost per unit of input, i.e. the salary level of the staff (including supplementary benefits), the rental value of buildings, the market cost of supplies, etc. This step may require a separate work sheet but probably will not need to be repeated each month.
4. Multiply the elements of No.2 by No.3 to establish the cost for each category of input.
5. Sum to get an estimate of the total cost of the activity for the time period in question.

There will be a set of "concentric rings" in which several levels of costs will fall. In the first ring, one will find all the costs vital to the operation of the project (i.e., family planning, oral rehydration services (ORS), tetanus toxoid injections (EPI) and respective personnel). The second ring includes costs relating to other health activities (e.g. additional MCH-FP health interventions (usually by FWV referral), independent government or other activities). The third and final ring includes research costs.

- Impact (Effectiveness):

Parallel to the input rings are the output measures. The ideal approach for measuring the demographic impact of family planning would be to use observed variations over time and/or space in the fertility behavior of the population. Using appropriate causal models and statistical techniques one may estimate the impact of MCH-FP activities(3). Four are being considered at present: Distribution of services, MCH-FP acceptors, Couple-Years--Protection (CYP) and Birth Averted or Prevented (BP), (in ascending order of sophistication). Due to limitations in the data, however, we may have to employ a panultimate measure of impact. With Blocks AC and BD of Matlab, for the years 1980 to present, we expect to have complete data in order to utilize the Birth-Prevented measure of output; for earlier years, we may have to choose a different measure. In comparing Matlab with the control area, however, a less sophisticated indicator will have to be used. The output measure depends on the availability and reliability of data; at this time the extensiveness of the data is unknown.

Once, data collection has begun we will assess the appropriate output indicators. Because surveillance systems are operative in all of the areas, we foresee no problem in obtaining the data of the output measures and preliminary input ring.

- Comparisons (The CEA ratio):

The analysis, as earlier noted, depends on the use of comparisons. "Cost-effectiveness comparisons are made on the basis of cost compilations that might analyze costs in any one of several ways. The most common of these are: total costs for obtaining a given level of effectiveness, average costs per unit of effectiveness, and marginal cost for additional units of effectiveness(4)." Given alternatives of about equal effectiveness, the comparison of total programme costs is most appropriate. This may be the case of Matlab strategies AC and BD, although, at this time we do not know if that is the case. This technique is used more frequently when the outcome is expected to be the same (e.g. in the building of two roads between equidistant points), which is not the case in Matlab. Therefore, we anticipate using one or both of the other two methods.

When programmes differ in the rates of effectiveness, the advisable comparison measure is average cost per unit of effectiveness(5). This should be the case of different MCH-FP interventions, where the programmes may exhibit widely varying results and widely varying costs. Provided the unit of impact is uniform (e.g. either BP, CYP and so on) across comparisons, the comparison is a valid one. While this feature is a very attractive one, it is also characterized by one major problem. Such a criterion implies that the most cost-effective ranking of programmes at one level of output pertains to other levels of output. There are two ways to mitigate this problem. One way is to take the level of scale of the operation into account by limiting the use of the comparison to when the scale of inputs or outputs is the same across intervention type. Another way, is by documenting the variation in all the costs in all the observed areas over time vis-a-vis the respective measure of impact. Both of these methods insure legitimacy of the use of the average cost per unit of impact ratio.

The third method, for which we also expect to have applications, is the use of marginal or additional cost per effectiveness unit. This is particularly useful where average cost per unit of effectiveness changes with the scale of the programme. This approach identifies how much additional expense (on inputs) is needed to create an additional unit of impact. For the purpose of expanding an MCH-FP programme or comparing what it costs different programmes, at the same level of impact, to create an

additional unit, this method is the most appropriate. Of course, this method has limitations in that it does not consider all the programme costs and effects, but only those on the margin. In toto, the three cost-approaches, each used under specified conditions, give us the opportunity to do a complete CEA.

- Analysis:

While the tools of the CEA are based on economic theory, the analysis itself fits into a broader framework of policy analysis and operations or evaluation research. The design of the analysis (i.e., an experimental design with pre and post treatment observations in the treatment and comparison areas) necessitates additional analytical scrutiny beyond that mandated by the CEA. For this reason, we may have greater confidence in the results of the study. Moreover, the CEA is the mechanism within the operations research paradigm by which to collect and analyze cost-data that is part of a larger analysis where costs are only one of the many inputs into the policy formation and implementation process.

d. Significance

A CEA is paramount for the management, practical cost-identification, and analytical processes mentioned earlier (see Rationale). It is also a desirable study on a much larger scale, both in Bangladesh and much of the developing world. A successful MCH-FP programme such as Matlab - a pilot project - serves as a model for many nations sharing conditions similar to those of Bangladesh. Because the CEA estimates the cost of implementations of a particular project over time and the impact from that implementation over time as a package, it will be possible to offer information for the duplication of these activities in Bangladesh and elsewhere.

Furthermore, a study of this caliber (i.e., in detail and extensiveness) stands on the forefront of the population and development field.

e. Facilities Required:

No additional facilities will be required to conduct this study.

f. Collaborative Arrangements:

None.

ENDNOTES:

- 1 David, Salkever, and Ismail Sirageldin. "Cost-Benefit and Cost-Effectiveness Analysis in Population Programs: Its Role in Program Planning and Management" in Salkever, Sirageldin and Osborn (eds.), Evaluating Population Programs, (NY: St. Martin Press, 1983) p.9.
- 2 Suggested Programme Components for Population Control Under Third Five Year Plan, 2nd draft, Population Control Wing, Ministry of Health and Population Control, Dhaka, June 1984, p. II-2.
- 3 See George Simmons, Ubaidur Rob and Stan Bernstein. "An Economic Analysis of Family Planning in Bangladesh". A RAPID Project Report, paper prepared for USAID Mission, Dhaka, Draft, June 1985, p.3. Also see George Simmons, "Public Expenditure Analysis and Family Planning Programs," in L. Tabah (ed.), Population Growth and Economic Development in the Third World, Vol.2, (Dolhain, Belgium: Ordina Eds., 1976), pp.543-591.
- 4 See Henry Levin. "Cost-Effectiveness Analysis on Evaluation in Evaluation Research" in Guttentag and Struening, (eds.), Handbook of Evaluation Research, (Beverly Hills: Sage, 1975), p.108.
- 5 *ibid.*

D. REFERENCES

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Phillips, James; Simmons, Ruth; Koblinsky, Marge. "Bureaucratic Transition. A Paradigm for Policy Development in Bangladesh". Paper prepared for the seminar on Seminar Influences on Family Planning Program Performance of the International Union for the Scientific Study of Population, Jamaica, April 1985.

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Salkever, David; and Sivageldin, Ismail; "Cost-Benefit and Cost-Effectiveness Analysis on Population Programs" in Evaluating Population Programs (NY: St. Martins Press, 1983).

Shepard, Donald; and Cash, Richard. "Manual for Assessing the Cost-Effectiveness of a Program for Control of Diarrhoeal Disease". Institute of Health Research, 1984 (Dec.).

Simmons, George; Rob, Ubaidur; Bernstein, S. "An Economic Analysis of Family Planning in Bangladesh". Paper prepared for USAID mission, Dhaka, March, 1985.

Simmons, George; Majumder, Khorshed; Rahman, Mafizur; Muhuri, Pradip; Phillips, James F. "The Application of Cost-Effectiveness Analysis to the MCH-FP Extension Project". Documentation Note, ICDDR,B.

Simmons, George. "Public Expenditure Analysis and Family Planning Programs" (Off print).

Sivageldin, Ismail; Salkever, David; Osborn, Richard. Evaluating Population Programs, (NY: St. Martin's Press, 1983).

Thompson, Mark. Benefit Cost Analysis for Program Evaluation (Beverly Hills: Sage, 1980).

E. ABSTRACT SUMMARY

The following are direct answers to Attachment 1a of "An Introduction to ICDDR,B Research Protocols".

1. The CEA will not affect new subject populations in that the study will examine costs incurred in Matlab Treatment and control area. These populations are already under observation. It is for this reason that these are to be the observed populace.
2. Not applicable
3. Not applicable
4. The collecting and analyzing of data involving persons' salaries will be kept confidential. The safeguarding measures entail identification of employees by title, level or grade only.
5. a.)
b.) Not applicable
c.)
6. Not applicable.
7. There are many potential benefits to be gained from the CEA. They are all on regional or societal level. For example, should we conclude that one delivery system is more effective than ~~other~~, the recipients of the other would then ~~be the benefactors of a systemic improvement~~. They are few societal risks in undertaking a CEA because from the onset, the desired goal which is clearly establish--is constant in all observed areas. /an
8. Not applicable.

benefit from an improved system...

F. SECTION III: BUDGET

(August 1985 - February 1986)

Sl. No.	Description	Cost in Taka	Cost in US Dollars
1.	Personnel services*	0	0
2.	Travel and Transportation		
	Dhaka-Matlab-Dhaka trip (3 trips/month, 2 days/trip)		
	Transport cost: Average cost per person (1/3 of Tk.2620) Tk.874/-per trip	15,732	583
	Per diem cost: Tk.150 per day per person (approx.) x 2 = Tk.300/- per trip	5,400	200
3.	Supplies and Equipment	7,000	259
Total		28,132	1,042

*All personnel costs are covered under other MCH-FP Extension Project.

**Conversion rate, Tk.27.00 = US \$1.00.

ANNEXURE (Not studied)

The following is a set of tables which will be used to guide and organize the collection of data for the service delivery facet (i.e., the first of the three concentric rings) of the Matlab MCH-FP Project. It is based on our understanding of the functioning of the project and is subject to change once the actual data gathering begins. Similar tables for the training and research activities of the project are yet to be developed.