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Practical Experiences from Developing Cost Management Skills of CWFP Programme Managers

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MCH-FP Extension Project (Urban)
Health and Population Extension Division

CENTRE
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Urban FP/MCH Working Paper No. 29

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Foreword

I am pleased to release these reports on urban Maternal and Child Health and Family Planning issues which are based on the operations research activities of the MCH-FP Extension Project (Urban) of the Centre. Over the years, the Centre has acquired a unique expertise on urban development matters that ranges from operations research on reproductive health, child survival and environmental issues to providing technical assistance for capacity building to service delivery organizations working in urban areas.

This work has produced important findings on the health conditions and needs of city dwellers, particularly the poor and those living in slums. The research has also identified service delivery areas in which improvements need to be made to enhance effectiveness. Together, these research findings have been translated into interventions currently being applied in government and non-government settings.

In order to carry out this innovative work, the Centre has established a partnership effort known as the Urban MCH-FP Initiative, with different ministries and agencies of the Government of Bangladesh and national non-government organizations, notably Concerned Women for Family Planning, a national NGO with wide experience in the delivery of MCH-FP services. The partnership receives financial and technical support from the United States Agency for International Development (USAID).

The overall goal of the partnership is to contribute to the reduction of mortality and fertility in urban areas. In practice, this joint work has already resulted in the development and design of interventions to improve access, coordination and sustainability of quality basic health services to urban dwellers with emphasis on the needs of the poor and those living in slum areas.

The Centre looks forward to continuing this collaboration and to assist in the wider dissemination and application of sustainable service delivery strategies in collaboration with providers in government, the NGOs and the private sector.

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Contents

Abstract vii

1. Introduction 1

1.1 Problem Analysis 1

1.2 Rationale 2

1.3 Objectives of the Intervention 4

1.4 Conceptual Framework 4

1.5 Research Questions 7

1.6 The Intervention 7

1.7 Activities of the Intervention 9

2. Methodology 10

2.1 Evaluation Methodology 10

3. Results 11

3.1 Section 1: Devising the means to providecost information by creating a Costing Tool 11

3.1.1 Development of a Costing Tool 11

3.1.2 Orientation Workshop 16

3.1.3 Data Collection 17

A. Data collection of expenditure and service output 17

B. Data collection for providers' time use estimation 18

3.2 Section 2: Conducting Cost Analysis 21

3.2.1 Estimating Unit Costs 22

3.2.2 Reviewing and Analyzing the Cost Data 25

A. Family Planning Services 25

B. Maternal and Child Health Care 26

3.3 Section 3: Enhancing the Capacity of Programme Managers 31
3.3.1 Decision making 31
3.3.2 The Prospects of Institutionalization 35
A. The Costing Tool 35
B. Opinions of Programme Managers Regarding Different Aspects of Cost Analysis and Cost Management 37

4. Limitations 38

5. Discussion 39

6. Policy implications 43

Reference 44

List of Tables

1. Comparison of time taken (in minutes) for the Health Worker in Wari to provide services 20

2. Comparison of time taken (in minutes) for the Paramedic in Wari to provide services 20

3. Comparison of time taken (in minutes) for the Field Worker in Wari to provide services 21

4a. Unit cost of services and service volume for three CWFP branches 23

4b. Unit cost of services and service volume for three CWFP branches 24

5. Three most frequently costly services across the six units 27

List of Figures

1. Flow chart of the conceptual framework of enhancing capacity of managers for cost management 7

2. Proportion of inputs in unit cost of services 28

3. Proportion of time use by different providers 29

4. Decision tree for sustainability at the branch level 31

Abstract

Currently, maternal and child health, and family planning (MCH-FP) programmes are faced with increasing resource constraints due to an increasing demand for services from population growth and reduced external funding. This has serious implications for the financial sustainability for most service delivery organizations. The needs are to develop managerial capacity to analyze the cost of services, to assess how well the resources are being utilized, and to formulate decisions that can enhance efficiency and cost recovery. In this context, the Urban MCH-FP Initiative conducted an operations research study with the following objectives:

(a) to provide programme managers with a costing tool that enables them to analyze the cost of delivering different components of a service package, and

(b) to enhance the capacity of programme managers to review cost data and make strategic decisions for cost reduction and cost recovery.

Six branches of Concerned Women for Family Planning (CWFP) were selected for the intervention, namely Khulna, Chittagong, Magura, Rajshahi, Tangail and Wari. The activities of the intervention consisted of a continuous process of development of tools, review and further analysis by the researchers as well as senior and field-level program managers. The programme managers were given orientation on the basic principles of costs and cost analysis. A costing tool, based on manuals used in other countries, was developed to calculate the unit cost of services. Data on service outputs and expenditures were collected from routine records by unit/branch coordinators. Personnel time allocation between service and support activities was estimated through observations. Cost analysis

workshops and review meetings provided a setting to analyze and review the cost data to formulate decisions for cost management.

The programme managers were able to estimate unit costs of services using the costing tools and available service data. They found the costing tools user-friendly. The providers identified high/low cost services and the reasons for variations in cost of services among branches. These findings indicate that cost analysis on a routine basis can be introduced into service delivery organizations.

Cost analyses revealed that new acceptor costs were high, and that in most branches, the cost of injectable contraceptives was high due to both labour and commodity costs. The labour costs constituted the major proportion of unit costs, i.e. 80% for field services and over 50% for clinic services. Almost 50% of service providers' time was occupied with record-keeping and other administrative tasks which indicates a dire need to increase productivity and streamline the managerial system by changing the service delivery system.

1. Introduction

1.1. Problem analysis

The Bangladesh family planning programme has been a remarkable success story in raising the contraceptive prevalence rate (CPR) from 7% in the mid seventies to 49% in 1996-1997 (BDHS,1996-97). However, this success has been achieved at a high cost due to the intensive resources invested by the programme to target increased contraceptive prevalence, and on the whole, increased family planning service coverage in the country. Despite the current high levels of contraceptive use, the phenomenon of population momentum ensures the continued growth of the population to be served by the programme. As in other parts of the world, programme managers in Bangladesh are faced with rising costs as the demand for services increases along with the size of the population. An increase in the size of population will require a corresponding increase in the volume of maternal and child health, and family planning (MCH-FP) services provided. For example, to reach the replacement fertility level (TFR = 2.2) by the year 2005 and to achieve an infant mortality rate (IMR) of 50 per 1,000 live-births will require a substantial increase in the MCH-FP service coverage. Therefore, during 1995 - 2005, family planning services will have to be extended from 27 million to 40 million families; contraceptive users will have to be increased at least by 50 percent, i.e. from 12 million to 18 million; CPR will have to be raised from 45 to 70 percent; and immunization coverage of children under the age of one year will have to go from 4.2 million to 6.3 million per year (Cunane, 1995).

To reach these goals, the estimated annual cost of the programme would require an increase from Tk. 480 crore (US $120 million) in 1995 to 880 (US $220 million) in 2005 (Cunane, 1995).

Along with rising costs, external funding of MCH-FP programmes is being reduced as it is also becoming increasingly difficult for the government and donors to meet these rising costs. Financial sustainability has become a priority for most organizations. "Sustainability refers to the ability of the project to continue, and implies that this would be done largely without external donor assistance" (Reynolds, 1990). Irrespective of funding cuts, the fact that costs are rising, and the move toward improving self- sufficiency has made managers feel the need to be able to rapidly assess how to decrease their costs and reallocate their resources. Increasingly, non-government organizations (NGO) are experimenting with ways to reduce their costs and improve their efficiency without affecting the quality of their MCH-FP services. However, the capability of local-level managers to conduct cost analysis and make cost management decisions is limited due to the lack of training and knowledge, and an inability to pinpoint logical ways to improve efficiency without negatively affecting quality, and subsequently, take appropriate steps based on those decisions.

1.2. Rationale

Now-a-days, programme managers are aware of the need to develop their capacity for financial decision-making and budgeting through a management process which:

(a) examines what amount of resources are needed to achieve a desired level of service output at optimal standards, and

(b) further explores areas within the organization as to where these resources can be obtained or reallocated from.

The process includes understanding unit costs, i.e. the cost per unit of output or outcome, and how they are affected by the service delivery strategy, and by the volume of service output.

In this context, the initiative to develop skills of local level programme managers to examine costs, and to understand the relationship between cost reductions and cost recovery becomes a natural requirement for most service delivery organizations. Therefore, an intervention was designed to enable the local level managers to conduct basic cost analysis and formulate decisions for cost reduction strategies.

According to Reynolds (1990), two basic ways in which cost analysis can be helpful to managers are as follows:

1. monitoring - to monitor expenditures to make adjustments in the allocation of inputs/resources used for producing services, if necessary, and
2. efficiency - to help a manager identify areas where savings can be made. If services can be provided at reduced costs while maintaining the same quality, the project (programme) will be more efficient.

These concepts are particularly applicable to Concerned Women for Family Planning (CWFP). The programme managers of CWFP, a leading national urban-based NGO, have undergone external funding cuts within the last three years. The result has been that the budgets of branches or units have been declining since 1994. For example, the budget of one branch in Dhaka, i.e. Wari, has been reduced by 14 percent during 1994-1996. The managers have had to make difficult choices about where to reduce their use of resources without the use of routine cost analysis procedures. Although review of the costs of different CWFP sectors has been conducted from time to time, it has not been done on a regular basis as part of their regular budgetary planning activities. Therefore, a joint effort has been made by CWFP and the MCH-FP Extension Project (Urban)

to try and enhance cost management skills of CWFP programme managers. This would enable branch managers to analyze their costs in a systematic and logical manner and take appropriate decisions based on the information generated.

1.3. Objectives of the intervention

The aim of this intervention was:

(a) to provide programme managers with the means to estimate their costs by developing a costing tool,

(b) to conduct basic cost analysis by using a costing tool, and

(c) to enhance the capacity of programme managers to review the information, i.e. cost data, and make strategic decisions on where cost reduction and cost recovery could be implemented

1.4. Conceptual framework

In the existing situation, programme managers need to enhance their capacity to identify different types of costs that are important. Costs are defined as, "the value of the resources used to produce a good or service". This analysis takes into account the operating costs or recurrent costs (costs that are incurred on a day to day basis and that last for a period of up to one year) of the organization. Recurrent costs include costs, such as salaries of personnel, rent, utilities, etc.

A simple definition of capital costs is the cost of those goods that last for more than one year. Buildings, vehicles and certain types of equipment are a few examples of capital cost items. In the intervention, capital costs were not calculated, but rather emphasis was given on recurrent costs. The reason for this focus on recurrent costs is that local

level managers have more discretion over managing recurrent costs in the short run than of the capital costs of their programmes, where decisions have to be taken on a long term basis. Therefore, programme managers are more concerned with the recurrent costs of their respective branches than the capital costs.

The cost per service for a given time period can be determined through adding up the value of resources being used for producing the service (total costs of the service), and dividing by the number of services that are provided. In other words, this is the unit cost of a service. Unit costs can also be called the average cost of a service, or the cost per output or outcome. Unit costs can be calculated very simply by dividing total costs by the quantity or number of services produced.

Unit cost = Total cost/Quantity

If we have a particular service activity and we know what resources[1] are required to produce that service, and the number of services provided within a given time period, we calcalculate the unit or average cost of providing that particular service.

[1]The inputs or resources of a service may be personnel, drugs supplies, vaccine supplies, family planning commodities, non-medical supplies (e.g., stationery, office supplies), non-drug medical supplies (e.g. syringes, cotton wool, antiseptic), and other items (rent, utilities).

Box 1. Equation for calculation of unit cost of a service

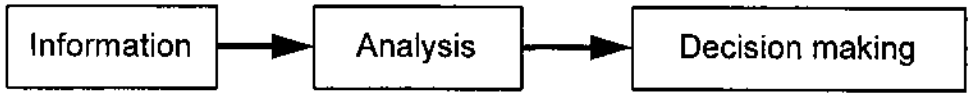
$$\text{Unit cost of service "A"} = \frac{\text{Total cost of inputs required to produce service "A"}}{\text{Total number of services "A" produced within a given time period}}$$

This equation indicates that there are two ways to decrease the unit cost of services. One way is to decrease the number of inputs (numerator) used for the activity, so that the total cost decreases. If the total cost of the activity decreases, then the costs per service, or average costs, will decrease provided the number of services remains the same.

The second way to decrease the unit costs of services is to increase the number of services provided (denominator). If the number of services provided increase and the costs of providing services remain the same (or increase slightly), the average cost per service will decline. However, if total costs are increasing, this will not necessarily hold.

These decisions can be taken on by analyzing average cost data and the information generated. For example, cost information, i.e. unit costs can be obtained from existing service and expenditure records and then analyzed by managers either at the central or field level, and strategic decisions can be made based on the information generated.

Fig. 1: Flow chart of the conceptual framework of enhancing capacity of managers for cost management



1.5. Research questions

This operations research intervention seeks to answer the following questions:

1. What type of cost information do managers need to improve their capacity for cost management?
2. How can they obtain the required information?
3. Is it possible to generate this type of information through existing, available data and is it possible to institutionalize the process of routine cost analysis?

1.6. The intervention

Concerned Women for Family Planning is a non-government organization which provides family planning and maternal and child health-care services in a defined geographic area through service-delivery areas called units or branches. Each unit or branch serves eligible couples (ELCO) and their children aged less than five years residing within these geographic boundaries. These units are run by local level managers called branch coordinators. The branch coordinator's job is to manage the clinic and field activities in their sites with a fixed annual budget and make decisions on a range of issues concerning the use of resources.

For CWFP, service delivery takes place both at the field and clinic. At the field level, the field workers deliver family planning commodities, such as pills and condoms, to the clients at their homes. They also provide counseling and referral for clinical methods of family planning and maternal and child health-care services. For example, they motivate mothers for child immunization, advise and refer clients to the clinic for clinical methods of family planning, etc. These workers are supervised by field supervisors. There are usually 4-6 field workers per supervisor.

The clinic personnel are comprised of paramedics and health workers and provide services both at the clinic and satellite clinics. At the clinic, they provide a package of services. Which include provision of medium and long-term family planning methods (excluding permanent methods, such as sterilization), side effect management, referral for permanent methods, antenatal care, postnatal care, immunizations and some limited curative care for women and children under five years of age.

Six units were chosen to participate in the intervention through discussions between Concerned Women for Family Planning and the MCH-FP Extension Project (Urban). These branches/units were a mix of high and low performing areas[2], and were located in different parts of the country. Also, CWFP senior managers and the unit coordinators of the six chosen units participated in the activities of the intervention.

The six CWFP branches that were selected for the intervention were: Wari in Dhaka, Khulna, Chittagong, Magura, Rajshahi, and Tangail. In these branches, the unit coordinator/ programme manager's job is to

[2]The cut off point for high and low performance is a CPR of 50.

manage the clinic and field activities in their sites with a fixed annual budget and make decisions on a range of issues concerning the use of resources. For this reason, the intervention focused on enabling the unit coordinator to analyze how well the resources in their units were being used and what strategic decisions they could take to improve efficiency where it was necessary.

1.7. Activities of the intervention

The intervention period began in January 1996 and ended in June 1997. During this period, the activities that took place were as follows:

i. Development of a costing tool;

ii. An orientation workshop on costs for unit coordinators and senior programme managers;

iii. Data collection from existing routine records using the costing tool;

vi. Data collection for estimation of time use of service providers;

v. A cost analysis workshop for reviewing the cost data generated through the costing tool and for formulation of cost management decisions;

vi. Discussion with programme managers[3] on the usefulness, applicability and institutionalization of the cost management activities.

[3]In this paper, programme manager refers to both senior managers and unit coordinators

2. Methodology

2.1. Evaluation methodology

Documentation of experiences and opinions of programmes managers' knowledge on costs and cost management issues was undertaken. During the intervention, the programme managers were introduced to the basic concept of costs, such as recurrent costs, unit costs, etc., and making cost management decisions based on these indicators. At the final stage of evaluation, a workshop was held to find out their views on whether they had benefitted from the intervention and whether they were able to identify issues relevant in managing their costs.

This was done by:

a) devising the means to provide cost information by creating a costing tool,

b) conducting cost analysis, and

c) enhancing the capacity of programme managers for taking logical decisions on cost management.

In other words, the unit costs were estimated for analysis from routine service data by using data collection forms included in the costing tool. This was done by the unit coordinators.

3. Results

3.1 SECTION 1: Devising the means to provide cost information by creating a costing tool

3.1.1 Development of a costing tool

A costing tool was developed to enable programme managers to identify the costs of different services, that is to provide the means for managers to calculate the unit cost of services. The "ingredients approach," which is to measure the cost of producing a specific item through step-wise allocation of the costs of different inputs in producing that particular item, was used as the basic approach for cost analysis for the intervention. The costing tool was an adaptation of the procedures used in the Bamako Initiative Model (Hanson and Gilson, 1993) which is an initiative to enhance cost recovery through health services in Africa. The general costing principles consist of the following five steps which are shown in Box 2.

Box 2. Five steps of the general costing principles

Step 1
Define basic service package
↘
Step 2
Identify resources used for producing these services and their quantities
↘
Step 3
Assign monetary values to each unit of input, calculate total cost of each input
↘
Step 4
Allocate costs to activities for which they are used
↘
Step 5
Calculate unit costs by service output measures

This tool was used for data collection of the cost of different items and afterwards cost analysis. The costing tool was developed to assist programme managers to conduct cost analysis and was comprised of two parts. Part 1 of the tool consisted of instructions and tables for collection of data for cost analysis, and Part 2 had detailed directions on how to perform the analysis, i.e. how to calculate unit costs.

Step 1: Define basic service package

The programme managers of Concerned Women for Family Planning specified the following service package based on organizational priorities. These services are provided from outlets both at the field and clinic.

1. Family Planning:
   a. Pills - supplying oral contraceptives to new acceptors and resupplying to current users;
   b. Condom - supplying condoms to new acceptors and resupplying to current users;
   c. Injectable - injections given to new acceptors, follow-up visits for subsequent doses, and side-effect management;
   d. Intra-uterine device (IUD) - new acceptor, follow-up for complications or side-effect management, removal of existing IUD;
   e. Norplant and sterilization referral

2. Maternal Health
   a. Antenatal care
   b. Postnatal care

3. Curative Care
   a. Curative care for women
   b. Curative care for children

4. Immunization
   a. Immunization of women
   b. Immunization of children and vitamin A distribution

Step 2: Identify resources used for producing these services

The next step of the tool involved determining the resources that were required to produce different services and to determine the quantity of those resources being used. The information on the use of resources or inputs, that are used to produce MCH-FP services or outputs was collected by the unit coordinators using Part 1 of the costing tool. The input categories that were used in the tool were:

1. Personnel time (service providers, such as paramedic, health worker, field worker, and administrative and support staff such as unit coordinators, accountant and peon)
2. Drugs (e.g. analgesics, antibiotics)
3. Vaccines
4. Family planning commodities (example: oral contraceptives, condoms, injections)
5. Non-drug medical supplies (example: syringes, cotton wool, antiseptic)
6. Non-medical supplies (example: stationery, office supplies)
7. Other items (example: rent, utilities, transport)

It should be mentioned here that there are only common inputs shared between the services provided. For example, the paramedic provides both family planning services and maternal and child health care services. On the other hand, inputs such as vaccines are specific to services, such as immunization for women and children and are not used for any other service provided by CWFP. This addressses the notion of joint/shared costs for optimal efficiency.

To deliver a particular service, one or more of these inputs or resources is necessary. For example, to provide child immunization the required inputs are: personnel, vaccines, non-drug medical supplies, other items, etc. Therefore, it is necessary to identify the resources to be able to calculate the cost of providing a service, such as immunization.

Step 3: Assign monetary values to each unit of input, calculate total cost of each input

At this stage, it was necessary to provide the corresponding monetary value of the resources being used for the different services. The unit coordinators were asked to collect actual expenditure information on the cost of inputs in their units and to estimate the value of donated items at international market price as well as other inputs. The reasoning behind this was that there is an opportunity cost, i.e. the value of resources that could be gained by using the resources in some other way, to the use of those resources and these costs should be considered when doing cost analysis. This is due to the fact that if donor resources were withdrawn, programme managers would need to pay for those commodities themselves and therefore, should consider these costs. Another term for this type of pricing is "shadow pricing" - a price that has been adjusted for various reasons, including donation, to yield to economic cost (Creese, 1994).

Step 4: Allocate costs to activities for which they are used

Then the subsequent step was to allocate the total cost of the line items (inputs) according to cost centers (services) at the service delivery points (outlets, such as clinic or field). Personnel costs for direct service providers (paramedic, health worker and field worker) were added in for each service by multiplying the percent of time spent on that activity by the employee's salary. In addition, personnel time spent on activities such as, record-keeping, professional interaction and resting were divided among the different services. The cost of other support personnel attached to the field/clinic (e.g., Field Supervisor, Ayah) was distributed proportionately among the respective services, according to the ratios worked out on the basis of unit time required to perform the corresponding services by the direct service providers and the total amount of those services produced. Costs such as, salaries of administrative personnel, non-medical supplies and costs of other items (rent, utilities) were firstly apportioned between field and clinic and subsequently among the corresponding services on the basis of the proportions worked out as mentioned above.

Commodities, such as drugs, family planning commodities, and vaccines are only used for some of the services and were added to the cost centers (services) for which they were used.

Step 5: Calculate unit costs by service output measures

The last step of the exercise was to calculate unit costs, where the total cost of a particular service category was divided by the number of units of output for that activity.

For this intervention, the unit costs for services estimated were based solely on providers' cost and did not include consumer costs. Also, the cost per client for providing a service was estimated. In other words, the cost for example, of supplying oral contraceptives to a client would also include motivational visits to the client as well as the actual acceptance visit. The calculations for the unit cost for new acceptors included the time taken for two motivational visits.

3.1.2 Orientation workshop

As mentioned previously, the objective of the intervention was to develop cost management skills of local level managers to enable them to use resources more efficiently and ultimately to reduce costs. Therefore, the activities of the intervention included an orientation workshop to introduce the programme managers to different types of costs and cost analysis.

A day long workshop was organized as part of the intervention activities and was conducted in two sessions. The 1st session was attended by all CWFP branch coordinators and senior managers of the head office, and the 2nd session was attended by only the six branch coordinators of the six chosen units and selected senior managers who were directly involved with the intervention.

The first aim of the workshop was to familiarize the programme managers with basic cost concepts by introducing them to different types of costs, such as capital and recurrent costs, fixed and variable costs, total and average costs, and opportunity costs, and how these costs are relevant to their everyday work.

The costing tool was developed through necessary adaptation of similar tools available, such as the Bamako Initiative Model. This was done prior to the workshop to calculate unit costs of services. The second objective of the workshop was to inform the programme managers as to what type of data was necessary for the tool, how to collect cost data and how to use the costing tool (Part I) for cost analysis . Detailed instructions were given to the participants on how to fill in the data. Also sources of information and filling procedures were discussed. A Bangla version of the guidelines was also distributed to the participants.

The Orientation Workshop on basic cost concepts was well received by the programme managers, and they felt that it would be useful in assisting them in their decision making.

3.1.3 Data collection

A. Data collection of expenditure and service output

The Unit Coordinators were requested to fill in the service delivery and expenditure information required for the Costing Tool (Part I), and bring it to the cost analysis workshop, held in September 1996. The unit coordinators were asked to fill in only the sections that had been discussed in the orientation workshop.

A few points were highlighted regarding the tables (in Part I of the costing tool) for collecting and filling in the data:

- the unit coordinators were requested to make sure the unit of the Family Planning commodity and drugs was defined. For example, for family planning commodity it was necessary to put cycle for oral pill or dose for injection. In the case of vaccines,

the programme managers were asked to put dose or vials, and the average dose per vial was calculated;

- they were also asked to calculate the amount of wasted and expired medicines/vaccines;
- the unit coordinators were also requested to provide an actual list of items to be included under the different categories of supplies, such as non-drug medical supplies, non-medical supplies, etc.

B. Data collection for providers' time use estimation

A time and motion study was conducted on the allocation of personnel time. Initially, a detailed questionnaire was included in the tool, so that preliminary data could be obtained on the time allocation of employees. For the final round of data collection, the direct observation method was used for obtaining time estimates.

B. 1 Time estimation of service providers through interviews

Field visits were made to all the six units by teams from UEP, to assist them in completing the first part of the costing tool. This included the above mentioned questionnaire, so that data on time allocation of employees could be obtained. Questions were asked about the way employees divided their time between service delivery, record-keeping, training, meetings and unoccupied time (time spent waiting for clients and on personal activities, such as eating, chatting, etc). This information was necessary to determine the cost of time that personnel spend in providing each type of service. The service providers that were interviewed consisted of paramedics, health workers, field workers and field supervisors.

The preliminary data showed that the time estimates obtained from interviewing service providers were inflated in almost every case for all six units, which led to inflated unit costs. There were also a few instances where the time estimates were found to be less than the actual time observed, and slightly deflated unit costs were obtained. This meant that the unit costs did not reflect the actual cost of the service. For example, in Wari the time observed for IUD removal was 16 minutes, whereas the time obtained from the service provider through the questionnaire was 5 minutes.

B. 2 Time estimation of service providers through direct observation

Since time is an integral factor in calculating unit costs, another round of data collection for time estimates using the direct observation technique was undertaken. The direct observation method was compared with a modified questionnaire to determine which method was more accurate. The observation technique was thought to be a more accurate source of information as the service providers were directly observed for 24 person days in the case of paramedics and 12 person days each for the health worker and field worker, giving a total of 48 person days of observation.

An observation sheet was prepared to be able to estimate how much time was required by direct service providers, such as paramedics, health workers and field workers, to provide each type of service. Once the observation sheet had been developed, it was pretested in the CWFP Lalbagh unit.

The next stage involved testing the observation technique and the modified questionnaire in the CWFP Wari unit, by teams from both UEP and CWFP. This was necessary to determine whether the methodology for

time estimation could be conducted independently by NGO personnel. The questionnaire was modified as it was thought that the previous one was too detailed and gave inaccurate time estimates. The following tables compare time data obtained through a questionnaire with time use data obtained through observation by the UEP and CWFP staff members for the Wari unit.

Table 1. Comparison of time taken (in minutes) for the Health Worker in Wari to provide services

Service	Questionnaire	Observation by CWFP	Observation by UEP
New acceptors for oral contraceptives	25	6	6
Resupplying and counseling current users of oral contraceptives	15	2	2
New acceptors of condoms	15	7	7
Immunization for one child	5	5	5

Table 2. Comparison of time taken (in minutes) for the Paramedic in Wari to provide services

Service	Questionnaire	Observation by CWFP	Observation by UEP
Screening and insertion of IUD for new acceptors	30	27	26
Screening and pushing injection for new acceptors	25	30	30
Counseling and pushing injection for current users	15	8	8
IUD removal	5	16	16

Table 3. Comparison of time taken (in minutes) for a Field Worker in Wari to provide services

Service	Questionnaire	Observation by CWFP	Observation by UEP
New acceptors for oral contraceptives	25	6	6
New acceptors for condoms	28	5	5
Resupply to current users of condom	16	5	5
Advise and referral for antenatal care	5	3	3

The tables show that the time obtained by using the questionnaire did not reflect the actual time providers spent with their clients. The difference between observation by staff from CWFP and observation by UEP staff was minimal.

Finally, for the actual data collection, three teams comprising of two members each, went to Chittagong and Rajshahi, Wari and Tangail, and Khulna and Magura respectively. The observation method was used in this round of data collection for obtaining accurate measures of the actual time use of the service providers on services.

3.2. SECTION 2: Conducting cost analysis

During the intervention period, three workshops were held in September, January and May, which were attended by unit coordinators and senior management of CWFP. The overall objectives of these

workshops were to estimate the unit costs for all the six units and review and analyze the cost data in order to take strategic decisions based on the information generated. The specific objectives of the workshops were:

- to calculate unit costs using the data generated by the costing tool;
- to compare the cost of different services, i.e. to identify different unit costs
- to identify high cost services and ascertain the reasons for variations of unit costs between different units.

3.2.1. Estimating unit costs

Data was processed and computed by the members of the staff of both CWFP and UEP. Computerized spreadsheets prepared prior to the workshop, using Microsoft EXCEL software were used for calculating the unit costs of the different services for the six units. Table 4 shows the unit cost[4] of services provided by the six CWFP branches.

[4]It should be mentioned here again that the unit costs estimated included market price value of inputs.

Table 4a. Unit cost of services and service volume for three CWFP branches

Service	Khulna		Chittagong		Magura	
	Unit Cost	Service Volume	Unit Cost	Service Volume	Unit Cost	Service Volume
Pill new acceptor (Clinic)	**161**	73	110	97	**135**	32
Pill new acceptor (Field)	94	108	**174**	77	**144**	69
Pill resupply (Clinic)	119	3989	47	1913	87	589
Pill resupply (Field)	37	7210	48	16000	56	6454
Condom new acceptor (Clinic)	118	36	77	67	**119**	13
Condom new acceptor (Field)	88	47	**141**	18	62	28
Condom resupply (Clinic)	159	2096	61	936	**109**	299
Condom resupply (Field)	43	3499	62	4700	46	1400
Injection new acceptor	**177**	349	**136**	901	92	647
Injection follow up dose	**183**	741	102	1456	**105**	1880
IUD new acceptor	**390**	41	**217**	145	65	212
IUD side-effects and follow up	125	99	97	355	19	467
IUD removal	**306**	34	**123**	24	27	67
Norplant and sterilization referral	4	8	0	0	32	42
Antenatal care	**140**	41	120	621	92	463
Postnatal care	38	2	50	45	49	214
Curative care for women	126	647	55	1066	31	1545
Curative care for children	56	420	55	174	27	844
Immunization for women	119	389	34	725	97	294
Immunization for children and vitamin A distribution	113	1062	46	4539	89	2546

Table 4b. Unit cost of services and service volume for three CWFP branches

Service	Rajshahi		Tangail		Wari	
	Unit Cost	Service Volume	Unit Cost	Service Volume	Unit Cost	Service Volume
Pill new acceptor (Clinic)	41	26	165	20	**90**	8
Pill new acceptor (Field)	64	12	154	21	88	16
Pill resupply (Clinic)	41	1484	**214**	1299	41	656
Pill resupply (Field)	34	19335	71	1579	27	19453
Condom new acceptor (Clinic)	56	35	163	6	**100**	8
Condom new acceptor (Field)	68	28	152	5	81	8
Condom resupply (Clinic)	39	1266	**212**	509	76	884
Condom resupply (Field)	33	14386	69	740	42	26411
Injection new acceptor	94	785	257	282	142	270
Injection follow up dose	93	2280	207	865	135	1194
IUD new acceptor	81	249	105	43	68	136
IUD side-effects and follow up	59	465	126	83	87	335
IUD removal	55	73	76	29	54	38
Norplant and sterilization referral	24	176	41	53	22	84
Antenatal care	232	1315	93	179	102	498
Postnatal care	205	391	48	30	68	37
Curative care for women	208	2068	72	2363	64	1390
Curative care for children	222	2201	44	829	57	304
Immunization for women	25	1127	173	234	38	717
Immunization for children and vitamin A distribution	15	3845	132	753	49	4799

The five most expensive services within the units have been highlighted.

3.2.2. Reviewing and analyzing the cost data

Once the unit costs were estimated using the observation time data, the five most expensive services were identified for each unit. These services have been highlighted in Table 4.

The most common high cost services for all the units were also determined, and the Unit Coordinators were also asked to identify the possible reasons for high unit costs.

A. Family planning services

It was found that, in Chittagong, Tangail and Wari, family planning services were expensive. All three units had high unit costs for injectables given to new acceptors, and Tangail and Wari had high unit costs for injectable follow-up clients. One of the reasons attributed to the high costs was the time service providers spent with their clients. For new acceptors of injectable contraceptives in Tangail and Wari, paramedics spent on average, 40 and 30 minutes respectively with their clients. This could be due to the fact that screening and counseling of the patient is routinely done for new acceptors of injectable contraceptives but the time spent in other units was lower.

In Khulna, the clinical methods of family planning were found to be more expensive. New clients (acceptors) for IUD services were found to be the most expensive, with a unit cost of Tk. 390. Further analysis of costs showed that as the service volume was low (41) in Khulna, the unit cost of IUD new acceptors was high, whereas in Rajshahi the number of IUD new acceptors in 1995 was 249, and the unit cost was low (Tk. 81).

In the case of follow-up visits for injectables, Khulna had a service volume of 741 per year compared to 2,280 in Rajshahi. Accordingly, the unit costs for Rajshahi were lower than that of Khulna.

Magura was also found to have high unit costs for family planning services, especially the non- clinical methods, such as supplying pills and condoms to new acceptors and current users. This could be explained by the low volume of services for the categories.

B. Maternal and child health care

Rajshahi differed from the other units since the average or unit costs for curative care for both women and children were high. One of the reasons identified was that the use of medicine is higher in Rajshahi than in other units. For instance, ANC patients are given a three month supply of iron tablets in Rajshahi, whereas this is not the case in all other units.

However, in Tangail the cost of immunizing one woman was one of the five most expensive services within the unit. For Wari, one of the most expensive services identified was antenatal care.

After comparing the unit costs of services for all six units, it was found that the three most costly services were for recruiting new acceptors for injections and oral contraceptives and for providing follow-up dose of injectables (Table 5).

Table 5. Three most frequently costly services across the six units.

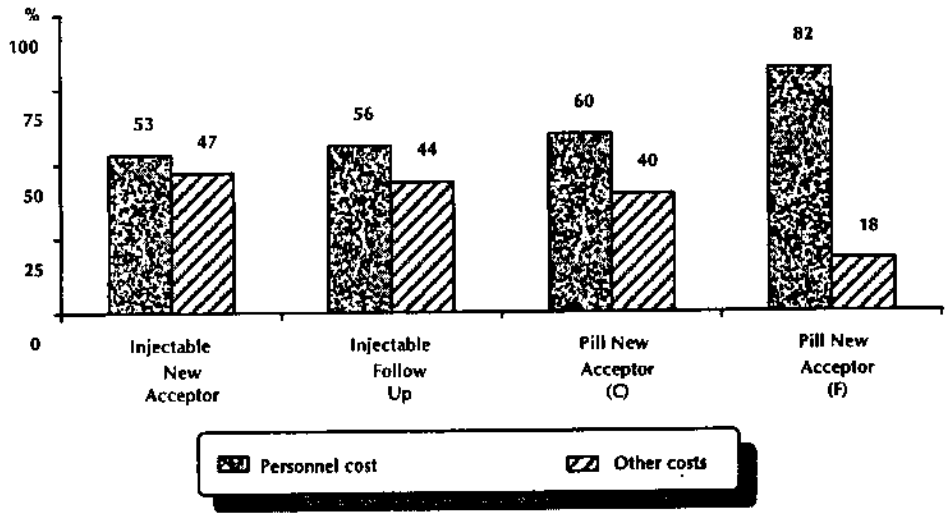
Service	Median (Tks)	Range (Tks)
Injection new acceptor	139	(92 - 257)
Injection follow-up dose	120	(93 - 207)
Pill new acceptor (Clinic)	122	(41 - 165)

The factors that were explained for the high unit costs were:

a) low service volume,
b) high input costs, such as personnel costs, and
c) high cost of other inputs or resources, especially other items, such as rent, utilities, etc.

On average, the personnel costs for the clinic constituted more than 50% of the service delivery costs. In the case of field services, especially for pill new acceptors, personnel costs comprised of 80% of the cost. Fig. 2 gives an example of the proportion of inputs (personnel vs all other inputs) of a few clinic services, namely new acceptors and follow-up clients of injectable contraceptives, new acceptors of oral contraceptives and one field service, i.e. pill new acceptor.

Fig. 2: Proportion of inputs in unit cost of services



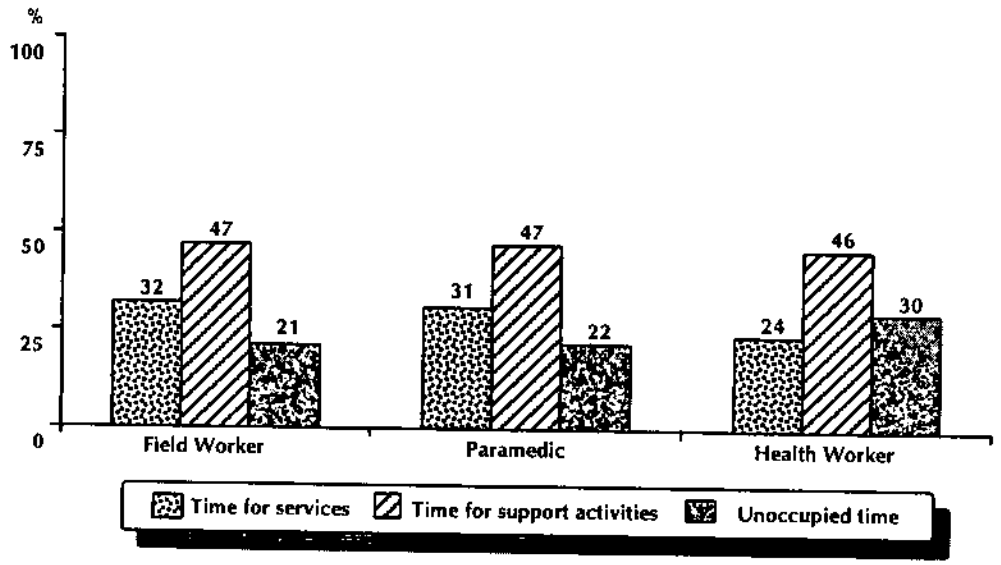
The reason identified for personnel costs comprising a major proportion of total costs was that field programmes are labour intensive and, as such, other costs make up a very small proportion of the cost for recruiting one new acceptor in the field.

Since personnel costs were found to make up the majority of the total unit cost of delivering a particular service, the next step was to determine how the time of service providers was being allocated. It was found that the average field worker spends the majority of time, i.e. approximately three hours of a working day on support activities, such as report-keeping and travel between home visits. Similarly, the paramedic and health workers spend an equal amount of time also maintaining

service records[5], carrying out preparatory activities, meetings and training. Time spent with clients were less in proportion, and there was a considerable amount of what is termed "unoccupied" time, that is time spent on waiting for clients and personal activities, i.e. eating, resting, etc.

Fig. 3 shows the proportion of time use by different providers for different activities.

Fig. 3: Proportion of time use by different providers



The programme managers were able, through cost analysis, to determine that :

a) new acceptor costs for family planning methods were high in most units;

[5]The time spent by the service provider writing in the client card during consultation was included in direct service and not record keeping. Record keeping was estimated separately.

b) personnel costs account for more than 50% of production cost for the clinic and between 70-80% for field production costs;

c) about 45 % of time of personnel time was spent on support activities, such as record- keeping, meetings, etc.

The main reasons reported by the programme managers for the variations between branches of unit costs were:

Differences in the size of catchment areas led to an increase in travel time. For example, the travel time for a field worker was much higher in Tangail than in Wari. Therefore, the unit costs for field services were relatively higher in Tangail than in Wari.

Differences in prescription practices resulted in high costs, especially for maternal health and curative care. For example, the normal practice in Rajshahi is to dispense a three months supply of iron tablets to pregnant women and accordingly the unit cost for antenatal, postnatal and curative care services were the highest ranking ones within their cost profile.

The results of the cost analysis showed that the unit costs of Khulna and Magura were higher than those of Rajshahi, Wari, Chittagong and Tangail. The participants from the head office and branch coordinators took part in the discussion in which possible ways for cost reduction and recovery were explored.

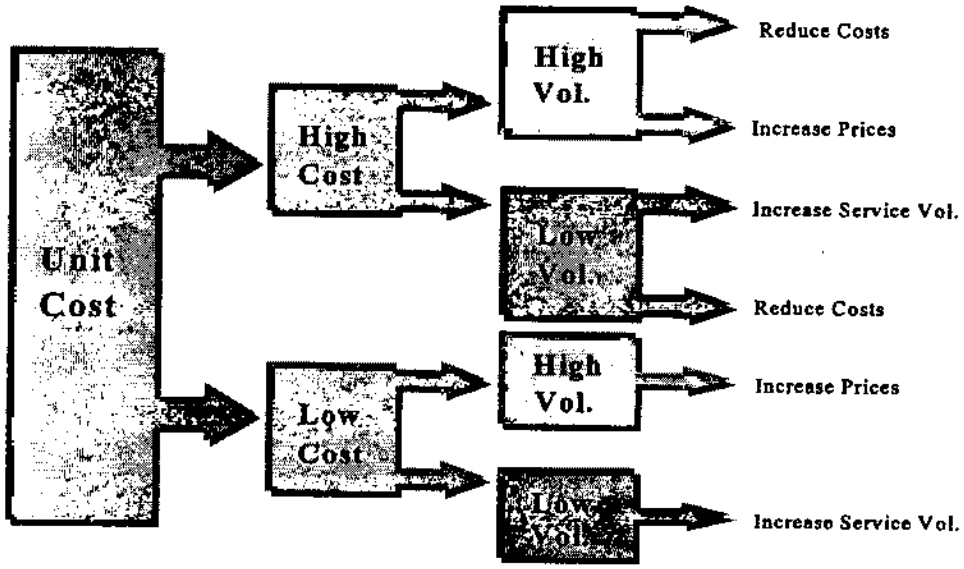
3.3. SECTION 3. Enhancing the capacity of programme managers

It was important to lead programme managers through the steps of cost analysis for formulating strategies and making decisions based on the unit costs of services and the level of productivity.

3.3.1 Decision making

For those branches with high unit costs, the service volume was examined. For those that were producing outputs at high levels, cost reduction was identified as a possible course of action. A flow chart of decisions was outlined (Fig. 4)

Fig. 4: Decision tree for sustainability at the branch level



However, it was found that within CWFP, there was a low amount of wastage of resources such as vaccines, drugs, etc. Also, the cost of non-

medical supplies (e.g. stationery, office supplies, etc.) was low and seemed to be used in an efficient manner.

Therefore, reducing the wastage of inputs was ruled out. The major area that was identified for cost reduction was personnel costs. It was thought that to enhance cost effectiveness by producing maximum output with minimum costs and also sustain programme performance, the required strategy would be to develop new service delivery strategies. However, the MCH-FP Extension Project (Urban), together with CWFP, was concurrently conducting an operations research study to test alternative strategies for the urban MCH-FP service delivery (Routh, 1997). The areas being tested for this approach were Hazaribag and Gandaria. Therefore, it was jointly decided that the experiences of those areas would be used for the necessary changes to be made in the service delivery systems in the CWFP units that had high unit costs and high service volume.

As shown by the decision tree, if the unit cost were high, but service volume was low, the decision could be to lower production costs and also to increase service volume as well.

Those units with low cost, but relatively high volume of services, were thought to be appropriate for increasing the existing price levels. Therefore, it was decided that Rajshahi, Chittagong and Wari would be used to try and increase the level of cost recovery by increasing the existing user fees. Consequently, a separate operations research study was carried out jointly by CWFP and the MCH-FP Extension Project (Urban) to establish systematic pricing mechanisms for urban MCH-FP services in the subsidized sector (Quayyum, 1997).

For those units with low cost, low volume productivity, the ideal course of action would be to increase service volume. To increase utilization, the necessary measures would be to invest in improved information education communication (IEC). Initially, this would lead to an increase in the cost of services, however, the increase in service volume would ultimately bring down the cost of those services.

One of the key issues was to identify the way cost management decisions were taken before the introduction of cost analysis procedures.

Senior managers of CWFP reported that, previously, the basis of their analysis was done by looking at their budget. Prior to the activities of cost management, they were not aware of the cost of providing a particular service to a client. They had never conducted this type of cost analysis before and had never looked at unit costs or been able to identify which services were high cost services.

> *We just knew that this much money was being spent and that most of the money went into salaries.*

They mentioned that the activities of cost analysis and cost management had enabled them to look at their costs in more detail and had identified the various components of the cost of a service.

Programme managers stated that when donor funding started to be reduced, they began to look more closely at how to minimize their costs. They became more concerned about identifying areas where costs could be reduced. The strategic decisions that were taken by CWFP were:

a) to reduce personnel costs, and
b) to reduce overhead costs

It was found that 70% of the CWFP budget went on salaries and therefore, the first area they identified for cost reduction was that of personnel costs.

Initially, CWFP increased the worker-couple ratio for field workers, in other words, having analyzed the situation, they increased the catchment population of the field worker. They also decided to decrease the field supervisor- supervisee ratio. This led to a larger number of field workers being managed by a fewer number of field supervisors.

CWFP finally decided to cut field allowances (conveyance money) for field workers. Although field costs were reduced, they found that it was not very helpful and did not reduce costs greatly. Therefore, the next step looked into the actual personnel employed. The next decision taken by the management was not to replace the retired field workers.

CWFP also tried another cost reduction strategy i.e. they decided to reduce commodity and overhead costs through bulk purchase of drugs and commodities, and bulk printing.

One point that was made by one of the senior staff members was that though they had taken these decisions very carefully by analyzing the existing situation, they were still not confident about the outcome. The cost analysis of the six units had identified similar cost reduction strategies and, therefore, strengthened their conviction of having taken the appropriate and necessary steps.

> *Once we had taken these decisions, we were not sure that they were the right decisions or whether it would improve the situation. But now we have done the cost analysis exercises, and have a better understanding of costs, we feel more confident about the decisions we have taken.*

3.3.2. The prospects of institutionalization

A final discussion with the branch coordinators and senior management took place during the second part of the workshop held in May. The objective of the exercise was to evaluate from a qualitative aspect, whether the costing tool could be institutionalized and whether the activities to enhance the cost analysis and cost management skills of programme managers had been useful.

A. The costing tool

The first part of the discussion was to determine whether the costing tool had been too complicated as this would have to be addressed if cost analysis using the tool was to be done on a regular basis.

The unit coordinators commented that the worksheets (Part I of the costing tool) for collecting expenditure data were not difficult to complete, but that they were time consuming.

> *Khulna : it was very time consuming converting vials into doses, especially as it was an annual estimate that was required.*

> *Rajshahi: although we have records of all the necessary information, it still took a long time compiling all the information for the whole year.*

The number of days that was required for data collection ranged from 3 to 7 working days. The average time for the six unit coordinators to collect and compile the expenditure data and service volume data was 4 days.

For the purpose of institutionalization, to simplify the data collection process and enable the organization to do yearly projections, the use of monthly data was suggested. The CWFP staff members felt that this would be easier for them to collect and forward to the central office for processing and analyzing.

When asked who the most appropriate person(s) would be, if in future data were to be collected for calculating unit costs, the participants responded that the unit coordinators should compile the final report. However, the data would be collected at various levels within the unit, e.g. the EPI service providers would keep a record of the EPI services, and then this would be sent via the office manager to the Unit Coordinator.

As mentioned earlier, time is an essential factor in calculating the unit cost of a service, therefore, it is of the utmost importance to ensure the most accurate time estimations. The capability of the NGO personnel for collecting accurate time data was tested by comparing their results with those obtained by the trained staff members from ICDDR,B. The results were found to be comparable. The various options identified for collecting time data estimation were by; a) staff from the central office Operations Research Section, b) Unit Coordinators, and c) a third party hired on a contractual basis. However, the participants suggested that time data should be collected at the local level, where unit coordinators of one unit would collect data from another unit to make the exercise more objective and more reliable.

The senior staff mentioned that, although the budget of CWFP was formulated on a three year cycle, they would be able to meet annually to review the cost data generated and, where necessary, take decisions based on the information generated.

It was also reported that CWFP were considering computerizing their Management Information System in the near future and this would enable them to use the costing tool more easily.

B. Opinions of programme managers regarding different aspects of cost analysis and cost management

The managers felt that the cost analysis exercise had been highly useful to them in terms of giving them an insight into the actual cost of providing a service and the various components of that service. For example, one programme manager commented:

> *Previously we were not aware that time was such an important factor in calculating costs, i.e the time of each service provider has an equivalent monetary value. This is something that we should all be aware of, and it will be useful to us in future. We will be alert and try and make the best use of time as we can. This costing exercise was very useful, and the if the costing tool could be carried out routinely, it would be very useful.*

For example, they reported that it was useful to be able to identify what constitutes personnel costs, or that there are direct and indirect costs, and also that there were costs of other items which had to be taken into account separately.

When asked whether other NGOs should participate in a similar kind of cost analysis exercise, all the participants agreed that it would be beneficial for other organizations to do cost analysis in a systematic way. One of the respondents replied:

> *Other NGOs should definitely do cost analysis in a similar manner. It will be very useful for them to understand their costs and a useful way of trying to improve their efficiency.*

4. Limitations

The expenditure data and service volume were collected for 1995. The time estimation for the preliminary data was collected in April-May 1996 using a questionnaire and the time estimation using the observation method was collected in April-May 1997. This was due to the fact that the time data using the questionnaire did not reflect accurately, the time service providers spend on delivering services. This in its turn generated unit costs of services that were less accurate. However, the time data collected using the direct observation technique were comparable to a study done in 1995 for three CWFP units in Dhaka (Levin et.al, 1996).

Also, the quality of care was not taken into consideration and, the decisions on cost reduction were based only on production quantities. The cost data that were generated did not reflect the level of quality of the services provided by CWFP. The intervention did not explore the area of time vs quality. For example, an increase in the time spent with a client may or may not mean better quality of that particular service, however it would lead to a higher unit cost. Therefore, in this case trying to reduce costs by reducing the time of service given may have a negative impact on the quality of care given, unless one knows the degree of compliance to standards of service delivery.

The scope of the intervention did not extend to measuring incremental cost analysis, i.e. calculating marginal cost of service delivery. If a decision were to be taken to increase the service volume, then marginal cost would have to be taken into account as it would be essential to be able to estimate the cost of providing an extra unit of service. Incremental cost analysis was reserved for more advanced management training, as the the initial aim of the cost analysis exercises was to facilitate programme managers to have an overall picture of costs and efficiency.

5. Discussion

It is possible for programme managers to estimate unit cost of services with available routine management data. The expenditure data can be collected at the unit or branch level and then sent to the central office for calculation of unit costs and for cost analysis. This could then be shared with the branch coordinators for their input. The central office can also establish guidelines on the basis of the cost data and analysis for implementation by some or all of the units.

Collecting monthly expenditure as opposed to annual expenditure data would be less time consuming and would allow for incremental cost analysis. As mentioned earlier, further strategic decisions are possible when marginal costs are measured (the cost of measuring each extra service). For example, this would be necessary if the volume of services were to be increased. Also, it is possible to calculate the cost per couple year protection (CYP) and other cost effectiveness indicators with the available data. This would provide the means of deciding on certain strategic issues such as, what would be the optimal service package.

The time estimation data can be collected by personnel from the central or local level of the organization. The time estimates obtained by the CWFP staff was compared with the results obtained by staff from UEP to ensure the applicability of the method for independent use by the NGO and also the accuracy of the data. The time data could be collected on a six monthly or yearly basis by the unit coordinators for their own branches. However, the consensus during the final meeting was that the branch coordinator of one unit should collect time data for another unit to ensure objectivity. The orientation given to the CWFP and UEP staff for collecting

time data using both the observation sheets and questionnaire took approximately three hours.

The data showed that new acceptor costs for family planning methods were high in most units especially for the clinic. One of the reasons identified was the low service volume for family planning methods in the clinic. If the aim is to move toward more permanent and clinic based services, then it is essential to initiate a substantial increase in the utilization of the services provided in the clinic. This would ultimately lead to lower unit costs.

Personnel costs account for more than 50% of the production cost for the clinic and between 70 - 80% for field production costs. To reduce costs in these systems, personnel costs need to be reduced. In this context, an alternative service delivery strategy could be implemented.

Also, the findings of the time data showed that approximately 45% of the time of personnel time is spent on support activities such as record keeping, meetings, etc. Therefore, to reduce costs of personnel, a more efficient record keeping system should be established. Similar findings were reported in a study[6] (1996) which showed that the total time of service providers that was spent with the client was very low, and substantive proportion of their time was spent on office work, such as record keeping .

[6]This study was conducted jointly by Population Development and Evaluation Unit, IME-Division Ministry of Planning, Government of Bangladesh, Associates for Community and Population Research and Family Health International.

The time data using direct observation of the service providers also showed that a large proportion of total working time was unoccupied time, which included time spent waiting for clients, time for eating, chatting, etc. The above mentioned study (1996) also found that due to reasons, such as low client volume, the percentage of unoccupied time of service providers was high. Therefore a high percentage of labour costs came from unoccupied time.

The cost data indicated that the cost of providing injectable contraceptives was high in almost all units. This was due to the high cost of the actual injection, and also because the time providers spend with clients of this particular method was high.

The data also showed that the annual service volume for maternal health services especially for postnatal care was low relative to the volume of family planning services. This would indicate that the utilization of the maternal health services was not adequate, therefore the strategy to increase service volume at the clinic, could be implemented by improving IEC.

The cost analysis tool and information generated through the tool was successful in enabling both CWFP senior managers and unit coordinators to understand unit costs and identify areas where cost reduction or cost recovery could be implemented. Previously, programme managers were able to take decisions based on the expenditure data from their budget. However, with the institutionalization of the costing tool and the information generated by the cost data, programme managers will be able to equate expenditure and productivity of the different branches of the organization.

For the purpose of the intervention, the cost analysis tool included recurrent costs of producing a service. To determine the full cost of production, the next step would be to integrate capital costs into the cost analysis tool. This would require programme managers to identify costs that have already been invested in the programme, i.e. sunk costs. If different strategies are being compared, such as door step delivery system versus alternative service delivery strategies, it is imperative to determine what capital costs have been invested. This may include induction training of personnel, whereas staff salaries would come under recurrent costs. However this would only be possible if the necessary records on capital cost items are available in the information system of the organization. Capital costs are highly relevant for understanding what degree of cost recovery or cost sharing would make a significant impact in total project or programme costs.

The computerized costing tool developed for cost analysis also enables the organization to run simulations by changing the quantity of resources used for providing a particular service or by changing the volume of services to see what impact such decisions or strategies would have on the unit cost of that service. In this way, enabling managers to predict the consequences of certain cost reduction measures. Simulations will help in taking appropriate decisions should they be executed on the basis of practical situations and real life conditions.

6. Policy implications

Cost analysis is possible with routine service record data and routine cost analysis can be introduced into service delivery organizations with measures to develop capacity for strategic planning. The data can be collected at the local or unit level and sent to the central office for processing and analyzing with the help of the costing tool. The data can be reviewed at the central level, and decisions based on the cost information generated can be shared with the various branches for implementation. It can be added that programme managers may be able to meet future challanges of increasing costs and reductions in external funding through cost analysis and consequent cost reduction.

The assessment of time allocation of personnel in service delivery and support activities is critical in cost estimations, and is the basis to determine the allocation of resources to each service. The observation method is the most accurate way of obtaining time data. The methodology for time estimation has been applied and can be conducted independently by NGO personnel.

Practical solutions are necessary to enhance cost effectiveness and efficiency particularly through cost reduction. As the major proportion of service providers spend their time on support activities, it would be necessary to streamline the managerial system by developing less time consuming and more practical ways of record-keeping. This would enable the service providers to spend the extra available time with additional clients.

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MCH-FP Extension Work at the Centre

An important lesson learned from the Matlab MCH-FP project is that a high CPR is attainable in a poor socioeconomic setting. The MCH-FP Extension Project (Rural) began in 1982 in two rural areas with funding from USAID to examine how elements of the Matlab programme could be transferred to Bangladesh's national family planning programme. In its first years, the Extension Project set out to replicate workplans, record-keeping and supervision, within the resource constraints of the government programme.

During 1986-89, the Centre helped the national programme to plan and implement recruitment and training, and ensure the integrity of the hiring process for an effective expansion of the work force of governmental Family Welfare Assistants. Other successful programme strategies scaled up or in the process of being scaled up to the national programme include doorstep delivery of injectable contraceptives, management action to improve quality of care, a management information system, and developing strategies to deal with problems encountered in collaborative work with local area family planning officials. In 1994, this project started family planning initiatives in Chittagong, the lowest performing division in the country.

In 1994, the Centre began an MCH-FP Extension Project (Urban) in Dhaka (based on its decade long experience in urban health) to provide a coordinated, cost-effective and replicable system of delivering MCH-FP services for Dhaka urban population. This important event marked an expansion of the Centre's capacity to test interventions in both urban and rural settings. The urban and rural extension projects have both generated a wealth of research data and published papers.

The Centre and USAID, in consultation with the government through the project's National Steering Committees, concluded an agreement for new rural and urban Extension Projects for the period 1993-97. Salient features include:

- To improve management, quality of care and sustainability of the MCH-FP programmes
- Field sites to use as "policy laboratories"
- Close collaboration with central and field level government officers
- Intensive data collection and analysis to assess the impact
- Technical assistance to GoB and NGO partners in the application of research findings to strengthen MCH-FP services.

The Division

The reconstituted Health and Population Extension Division (HPED) has the primary mandate to conduct operations research to scale up the research findings, provide technical assistance to NGOs and GoB to strengthen the national health and family planning programme.

The Division has a long history of accomplishments in applied research which focuses on the application of simple, effective, appropriate and accessible health and family planning technologies to improve the health and well-being of the underserved and population-in-need. There are several projects in the Division which specialize in operations research in health, family planning, environmental health and epidemic control measures which cuts across several Divisions and disciplines in the Centre. The MCH-FP Extension Project (Rural), of course, is the Centre's established operations research project but the recent addition of its urban counterpart - MCH-FP Extension Project (Urban), as well as Environmental Health and Epidemic Control Programmes have enriched the Division with a strong group of diverse expertise and disciplines to enlarge and consolidate its operations research activities. There are several distinctive characteristics of these endeavors in relation to health services and policy research. First, the public health research activities of these Projects focus on improving programme performances which has policy implications at the national level and lessons for international audience. Secondly, these Projects incorporate the full cycle of conducting applied programmatic and policy relevant research in actual GoB and NGO service delivery infrastructures; dissemination of research findings to the highest levels of policy makers as well as recipients of the services at the community level; application of research findings to improve programme performance through systematic provision of technical assistance; and scaling-up of applicable findings from pilot phase to the national programme at Thana, Ward, District and Zonal levels both in the urban and rural settings.

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