# Health Economics Unit

Policy Research Unit, Ministry of health and Family Welfare Government of the People's Republic of Bangladesh



# Public Expenditure Review of the Health and Population Sector, 1998/9

# Research Paper 17

January 2000

Anisur Rahman, Local Consultant, Quazi Liaquat Ali, Senior Assistant Chief Priti Dave-Sen, Associate Economist & Tim Ensor, Senior Economist.

#### Editors:

Md. Abul Qasem, Joint Chief and Line Director Tim Ensor, Senior Economist Priti Dave-Sen, Associate Economist Clinic Building - 4<sup>th</sup> floor Bangladesh Secretariat, Dhaka Tel: + 880 2 8615408

Tel: + 880 2 8615408 Fax: + 880 2 8617310 Email: lodiheu@dhaka.agni.com

# Past papers prepared by the HEU

#### Working papers

Working papers report on recent research carried out by, or in collaboration with, the Health Economics Unit. The research may be based upon new primary data or upon the fresh analysis of secondary data.

- 1. A public expenditure review of the health and population sectors, September 1995
- 2. An analysis of recurrent costs in GOB health and population facilities, July 1995
- 3. Balancing future resources and expenditures in the GOB health and population sectors, January 1996
- Mobilising resources through hospital user fees in Bangladesh: a report on quality and ability to pay, August 1996
- 5. An assessment of the flow of funds in the health and population sector in Bangladesh, January 1997
- 6. Myemensingh Medical College Hospital: financial analysis (FY1994-5), July 1997
- Cost analysis of caesarean section deliveries in public, private and NGO facilities in Bangladesh, March 1998
- Cost-effectiveness analysis of caesarean section deliveries in public, private and NGO facilities, April 1998
- Unofficial fees at health care facilities in Bangladesh: price, equity and institutional issues, September 1997
- 11a Cost benefit analysis of reducing lead emissions from vehicles in Bangladesh, January 1998.
- Health and technical cost benefit analysis of options for reducing lead emissions from motor vehicles inBangladesh, January 1998
- 12. Economic aspects of human resource development in Health and Family Planning: flow of funds, September 1998
- Economic aspects of human resource development in Health and Family Planning: dual job holding practitioners, September 1998
- 14. Economic aspects of human resource development in Health and Family Planning: Costs of Education and Training, September 1998.
- 15. A survey of private medical clinics in Bangladesh, September 1998.
- 16. Bangladesh Facility Efficiency Survey, November 1999
- 17. Public Expenditure Review of the Health and Population Sector, 1998/9

#### **Research Notes**

Research notes are prepared by staff of the Health Economics Unit or other collaborating units. The objective is to raise important research questions that might later be researched in more depth. The series includes research concept notes, structured literature reviews and surveys of current research in a particular area.

- 3. Draft terms of reference and background briefing document: a pilot programme for resource mobilization through user fees in the MOFHW, Bangladesh, September 1995
- 4. Key issues in costing an essential package of health services for Bangladesh, May 1996
- 5. User fees, self-selection and the poor in Bangladesh, August 1996
- 6. An agenda for health economics research concerning antibiotics usage standards in developing countries: the case of Bangladesh, July 1996
- 7. Experiences with resource mobilisation in Bangladesh: issues and options, June 1997
- 8. A pre-feasibility analysis of social health insurance in rural Bangladesh: the NGO model, June 1997
- 9. Resource envelope for the 5<sup>th</sup> health and population project: preliminary estimates, May 1997
- 10. Resource envelope estimation for HAPP5, November 1997.
- 11. Health insurance for civil servants of Bangladesh, January 1998.
- 12. Private medical clinics in Bangladesh, February 1998
- 13. Development of a Health Economics Database Archive for Bangladesh, September 1998.
- 14. Pricing health services: where to now?, November 1999.

#### Summary

The purpose of this Public Expenditure Review (PER), the fourth conducted by the Health Economics Unit, is to examine progress in implementing HPSP through a review of public spending on the programme during the first full year of the sector wide strategy. This includes a review of funding flows in the context of the key financial indicators for monitoring. A companion paper, *Economic indicators for monitoring the HPSP*, suggests a framework for developing the monitoring process in the next few years. In particular to place greater emphasis on the evaluation of outputs in both a financial and a broader economic context.

A number of key messages are suggested by this Public Expenditure Review.

- > Spending during 1998/9 was significantly lower than planned largely as a result of delays preparation and approval of Operational Plans and delays in development budget disbursements.
- A provisional analysis suggests that allocations by geographic region (division) bear little relation to measures of health status or service need. Further work is required to better relate geographic spending patterns to measures of local need.
- ➤ Lower than expected disbursement of the development budget largely accounts for an increase in the overall proportion of expenditure on salary items.
- ➤ More than 70 per cent of expenditure through the ESP health and reproductive health operational plans (which account for the majority of ESP spending) was on reproductive health services.
- ➤ Based on expenditure patterns greater emphasis is given to family planning than maternal health both in terms of overall allocation and in terms of spending as a proportion of allocation.
- > Spending on ESP services represent a significant proportion of overall spending. Even allowing for some uncertainty about estimation, the proportion (65 per cent) now exceeds the end target for ESP spending.
- ➤ The ESP/non-ESP split takes no account of:
  - relative allocations to component services,
  - efficiency of service provision, or
  - equitable allocation of benefits.

A small number of output based financial and economic indicators are now required to monitor progress. This PER suggests some of the key indicators to monitor.

# Contents

Summary	1
Contents	2
Acknowledgements	3
Abbreviations	4
Introduction	5
Expenditure review of health and population sector	6
Sector allocation	6
ESP and non-ESP spending.	
Expenditure on ESP sub-components.	
Sources of funding	13
Gender Equity	
Expenditures on maternal health	
Sources of funding for maternal health	
Public Expenditure Benefits Incidence Analysis	14
Patterns of geographical allocation	15
Developing economic indicators for monitoring HPSP	17
Information systems	17
Monitoring indicators	18
References	19
Annex 1: Gender Equity Analysis	
Annex 2: Health and Population Allocation and Expenditure in Five-Year	Plans
(Crore taka)	
Annex – 3: Table: Per Capita Expenditures by MOHFW, 1991/92-1998/99	
Annex – 4: Trends in MOHFW Revenue and ADP Expenditures (Crore Taka)	
Annex -5: GOB and Donor Expenditure in MOHFW Financing and for	
Government	
Annex - 6: Government and Donor's Contribution in the MOHFW Expenditure	
Allocation for 1998/99 in Health and Population Sector. (Crore taka)	
Annex 7: Distribution of total for Salary and Non-salary recurrent and for c	
expenditures, 1998/99 (Crore taka)	
Annex 8: Development expenditure of MOHFW by operational plan and ESP	
ESP breakdown for 1998/9 (core Taka)	32
Annex 10: Development expenditure by source and operational plan (Million	
	34

## **Acknowledgements**

We are most grateful to the following persons for helping in the preparing of this PER through advice, comments and provision of data: Mr M. Shamsul Hoque, Line Director, (ESP) DGHS; Dr A. S.M. Kamal Line, Director Resource and Development, DGFP; Dr Md. Hasanul Abedin Khan, Deputy-Chief Accounts Officer, MOHFW; Mr Md. Shajahan, PCC MOHFW; Dr Badiuzzaman, PCC; Mr Ziauddin Ahmed Khan, PCC; Mr Mohaimen IT Consultant, MAU and Dr Enamul Karim, Consultant, HLSP.

#### **Abbreviations**

ADP Annual Development Programme
ARI Acute Respiratory Infection
BBS Bangladesh Bureau of Statistics

BINP Bangladesh Integrated Nutrition Project

CIET Community Information Epidemiological Technology CMMU Construction Management & Maintenance Unit

CMR Crude Mortality Rate

CPR Contraceptive Prevalence Rate

DGFP Directorate General of Family Planning DGHS Directorate General of Health Services

DPA Direct project Aid

ESP Essential Services Package EOC Emergency Obstetric Care

FYP Five Year Plan

GDP Gross Domestic Product
GIO Gender Issues Office

GOB Government of Bangladesh HEU Health Economics Unit

HPSP Health and Population Sector Programme

IMR Infant Mortality Rate

MAU Management Accounting Unit
MIS Management Information Systems
MOHFW Ministry of Health and Family Welfare

NGO Non-Government Organisation
PER Public Expenditure Review
PIP Project Implementation Plan
PCC Programme Co-ordination Cell

RIBEC Reforms in Budgeting and Expenditure Control

RPA Reimbursable Project Aid SWAp Sector Wide Approach STD Sexually Transmitted Disease

TFIPP Thana Functional Improvement Project

UNICEF United Nations International Children's Emergency Fund

#### Introduction

The Health and Population Sector Programme (HPSP) was launched 1<sup>st</sup> July 1998 and started implementation by the Government of Bangladesh as a sector wide strategy. The strategy emphasises a Essential Services Package (ESP) together with measures to restructure the entire health system to make it more responsive to the health needs of the country.

The Programme Implementation Plan (PIP) defined three financial indicators for monitoring the HPSP. It was always expected that these indicators would be refined as the sector programme got underway. The indicators were:

- proportion of public spending devoted to ESP a proxy for allocation to priority services;
- ➤ proportion of health sector recurrent expenditure going to important non-salary components (particularly medicine and maintenance) a proxy for technical efficiency;
- ➤ health sector recurrent expenditure as a proportion of total expenditure a proxy for the sustainability of the programme.

Each of these indicators measure input rather than output or outcome. The targets for HPSP and the current levels of each indicator are shown in table one. From this table it is clear that each indicator has already been achieved. This is, in part, indicative of the general strategy of HPSP that attempted to channel resources to priority services. It also suggests that more sophisticated indicators are now required that will measure not just inputs into the process of providing essential services but also the outputs achieved. We return to this theme at the end of the paper.

Table one: Financial Indicators of the HPSP

Indicators	Base Level 1997	Final Level 2003	Current level
Total Spending on the Essential Services Package (delivery and support) as a proportion of total health sector spending	60 per cent	65 per cent	65 per cent
Proportion of health sector recurrent expenditure going to important non-salary components (esp. medicine, maintenance) versus going into salary component	23 per cent	30 per cent	43 per cent
Proportion of health sector expenditure for recurrent rather than capital expenditure	75 per cent	80 per cent	85 per cent

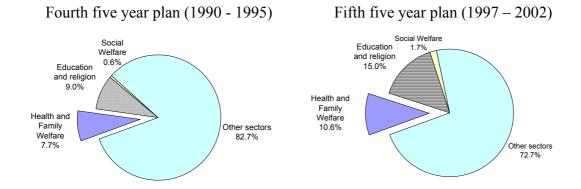
The purpose of this Public Expenditure Review, the fourth conducted by the Health Economics Unit, is to examine progress in implementing HPSP through a review of public spending on the programme during the first full year of the sector wide strategy. This includes a review of funding flows in the context of the key financial indicators for monitoring. A companion paper, *Economic indicators for monitoring the HPSP*, suggests a framework for developing the monitoring process in the next few years. In particular to place greater emphasis on the evaluation of outputs in both a financial and a broader economic context.

# Expenditure review of health and population sector

Sector allocation

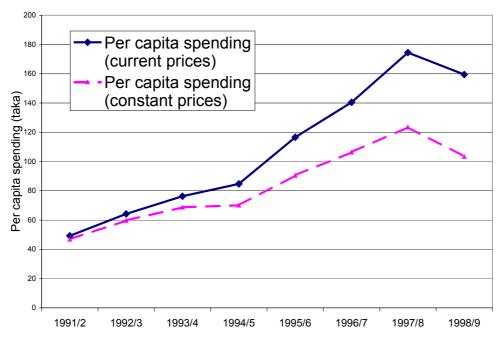
Over the course of the 1997-2002 five year plan the health and population sector has been allocated 10.6 per cent of the planned budget. This compares with an allocation of 7.7 per cent during the fourth five year plan (see figure one and Annex two).

Figure one: Proportionate allocation of government funding to health, 4th and 5th Five Year Plans.



Spending on health and family welfare has shown a steady increase during the 1990's (see figure two, annex three). In nominal terms spending increased more than three and a half times between 1990 and 1998. In real terms (constant prices) spending has doubled. Spending has increased at a rate faster than GDP throughout the 1990s. This reflects increasing priority given to health and other social sectors (see figure one), together with anj improving macro-economy and government revenue generation.

Figure two: per capita spending (current and constant 1990 prices)



Health Economics Unit, Policy and Research Unit, Ministry of Health and Family Welfare

Planned and actual allocations for 1998/9

For 1998-1999 a budget of TK 2,123 Crore was approved by Government for the health sector. This represented an increase of about 14 percent over the 1997/8 actual expenditure (see figure three and annex four and five). The original PIP allocation was TK 2,069 Crore.

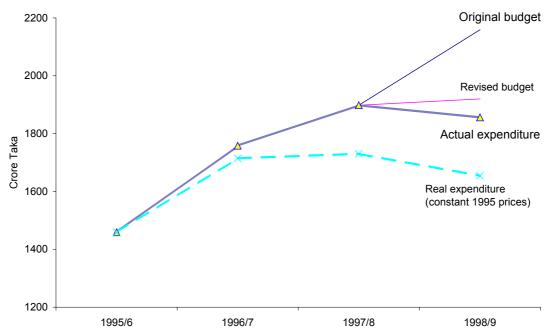


Figure three: Revenue and development spending 1995-99, Original and revised budget 1998/9.

Note: Original budget was set prior to the start of the financial year. Revised budget was established after the first nine months of financial year.

During 1998-1999 actual disbursement of development spending has fallen short of the planned budget by around TK 292 Crore (23 per cent, see annex six). Nine months after the beginning of the financial year the budget was revised downwards to TK 1,920 Crore<sup>1</sup>. Final expenditure for the year was TK 1,857 Crore. It is worth observing that for the government sector as a whole expenditure slightly exceeded the initial agreed allocation. (see annex four).

The fall is accounted for largely by lower expenditure via development partners. Some of this fall has been made up for by an increase in revenue spending compared to budget. In real terms this spending has fallen by four per cent on 1997/8. As a proportion of GDP public health spending fell from 1.4 to 1.2 per cent (annex three).

A number of reasons account for the short-fall in development spending. These include:

- ➤ late approval of some operation plans some were not approved until January or February for the financial year.
- ➤ lack of understanding of how the SWAp procurement procedures operate;

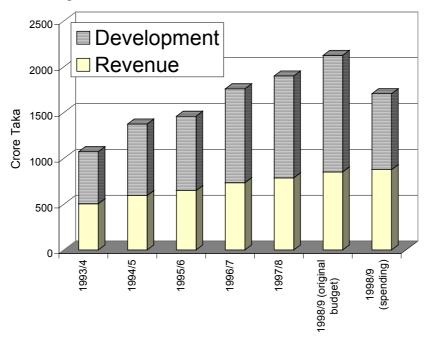
\_

<sup>&</sup>lt;sup>1</sup> This paper will make reference to both budget estimates at different points. We refer to the budget that was approved just after the start of the year as the *approved budget*. The budget that was revised after nine months of the year is referred to as the *revised budget*.

lack of knowledge of time lags for approval for international procurement.

These are probably largely attributable to the unfamiliarity of many of the procedures for operating a programme rather than a collection of projects. It is likely, therefore, that these factors are mostly of a transitory nature. In the next year, as procedures become more familiar, much of this shortfall may be made up.

Figure three: total funding of the health sector in the ADP and revenue budget, 1993/4-1997/8 actual, 1998/9 budget and actual, constant TK crore.



The share of the revenue budget was planned to be just over 40 per cent (see figure three). This would have continued the trend over the last five years of a declining revenue share of spending. Because development spending was less than planned the proportion has actually increased to around 51 per cent. Health and population expenditures

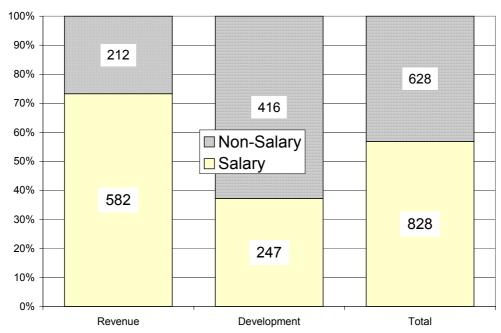
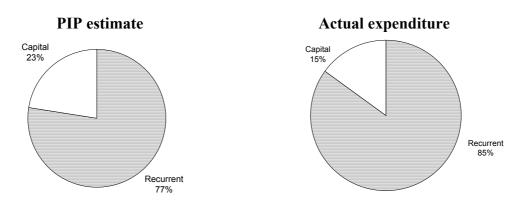


Figure four: distribution of recurrent expenditure by salary and non-salary items (per cent and Crore Taka).

The lower than expected development expenditure have also influenced the proportion spent on salaries compared to non-salary items. Just over TK 212 crore (26 per cent) of recurrent revenue expenditure and TK 416 Crore (63 per cent) of development expenditure was spent on non-staff related items. This represents about 43 per cent of total spending (figure four and annex seven). This is a decrease from a projection for the year of about 50 per cent. It largely reflects the fact that while development spending, which is mostly allocated to commodities and equipment, has fallen short of target spending on salaries, which is largely dependent on staff in post, has been maintained. Assuming that next year a greater proportion of the approved development budget is disbursed this proportion should decline once again.





Lower than expected development budget disbursement has also affected the share of spending on capital items since revenue spending is largely on recurrent items (mostly staffing). As a consequence, actual capital spending only accounted for TK 258 Crore (15 per cent) of total disbursements compared with the PIP estimate of TK 470 Crore (23 per cent) (Annex 7).

# ESP and non-ESP spending

For the PER expenditure was classified according to whether it is ESP or non-ESP related. Classification was based on estimates provided by PCC on the proportion of spending expected to be on essential services in each HPSP component. Some of the key categories were then double checked by examining individual operation plans and consulting with line directors. The proportions used to classify spending are given in annex eight and nine.

On the basis of this classification total ESP spending as a proportion of total HPSP expenditure for both revenue and development budgets was 64 per cent (see figure five). This proportion indicates the priority given to spending on essential services and so a basic indicator of the development of HPSP.

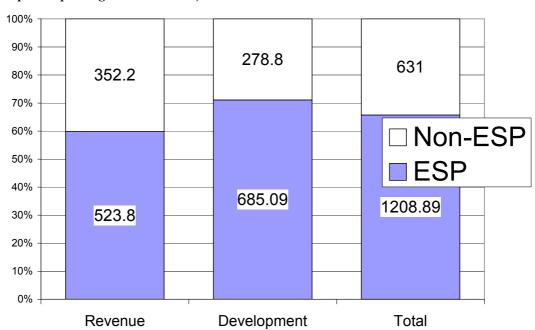


Figure five: ESP and non-ESP spending in the HPSP, year one (proportion of revenue and development spending and Crore Taka)

Although important, as an indicator for programme monitoring a number of qualifications are in order.

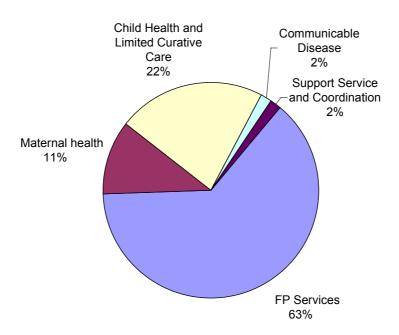
- The figure relies on a number of broad assumptions that still require verification. There is an assumption, for example, that all expenditure at Thana and below is on ESP service delivery (see annex eight and nine). The basis for this is that all the commodity and equipment expenditure at this level is related to ESP services and that commodities, to a large extent, determine staff work patterns. Yet it is also possible that many of these commodities could be used for non-ESP purposes particularly if unofficial financial incentives encourage staff to deliver lower priority (non-ESP) services.
- Another assumption is that all district hospital expenditure is on non-ESP services. This again is questionable since many district hospitals, perhaps particularly in urban areas, deliver primary essential services to presenting patients.

The indicator is a measure of input or structure. As such it says nothing about the effectiveness with which inputs are converted into outputs or outcomes. More sophisticated economic indicators will be required to measure these impacts.

Expenditure on ESP sub-components.

The ESP/non-ESP split does not indicate the relative importance attached to individual components. Currently, it is difficult to allocate all spending between ESP sub-components. Some estimates were obtained from the ESP-health and ESP-Family Planning operational plans which together made up more than 63 per cent of development spending in 1998/9 (annex one/table ten). These plans indicate that around 74 per cent of spending in 1998/9 was on reproductive health services (see figure six) - divided between family planning (63 per cent) and maternal health (11 per cent). Spending on child health, limited curative care and communicable diseases together account for 24 per cent of spending.

Figure six: Division of development spending by ESP sub-component for ESP Family Planning and health directorates.



The actual spending patterns reported here diverge somewhat from the provisional estimates of spending by sub-component expected, given the allocations made at the time of writing the PIP (see box one). These suggest that the proportion spent on reproductive health should be between 50 and 60 per cent while almost a quarter is expected to be spent on child health. A number of qualifications are in order that may explain part of this difference:

- 1. Only development expenditure can currently be divided up by sub-components.
- 2. The development budget estimates exclude around 37 per cent of spending not allocated through the Family Planning and Health Directorates.
- 3. As already mentioned, spending patterns for 1998/9 are lower and probably not typical of the pattern to be expected for the rest of the HPSP.

In order to provide more accurate figures in the future a basis for allocating the staff dominated revenue budget is required. In the absence of RIBEC activity coding for the entire budget, a survey of facilities is required to obtain estimates for staff work patterns and time allocation to each ESP component. The Health Economics Unit are planning to undertake such a study in the next few months.

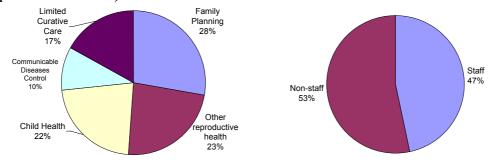
#### Box one: HPSP expenditure by ESP components: some provisional estimates

It is currently not possible to divide up all HPSP spending according to ESP component categories. While commodity and equipment spending in the development budget can be allocated to components, much of the revenue budget, largely staffing expenditure, is not divided up by activity. The HEU is currently planning a costing study which will allocate staffing and other expenses at Thana level and below to the main ESP component categories. This should be ready for the next PER.

Some provisional estimates for the division of ESP component expenditure were computed by utilising a study produced by URC (Barkat et al, 1999). This study provided detailed estimates of staff work patterns on reproductive health and family planning, child health care, communicable diseases and other primary health care services (loosely limited curative care). The work patterns generated were then used to allocate staffing expenditure. Commodity and equipment expenditure was allocated by using annualised estimates from the original Project Implementation Plan. The final total represents an estimate for the annualised costs over the course of the five year programme rather than for the current financial year.

The final figures give an estimate for the proportions that can be expected to be spent on each ESP component assuming that commodities and equipment are allocated in the way envisaged by the PIP. An annual requirement of 1460 Crore Taka is estimated. This is slightly higher than the estimate in the PIP of 1239 Crore Taka since it includes a larger allowance for depreciation. Current spending diverge from the pattern as a result of differences between planned and actual allocations.

Annual proportionate spending on each ESP component required to finance the HPSP (provisional estimates)

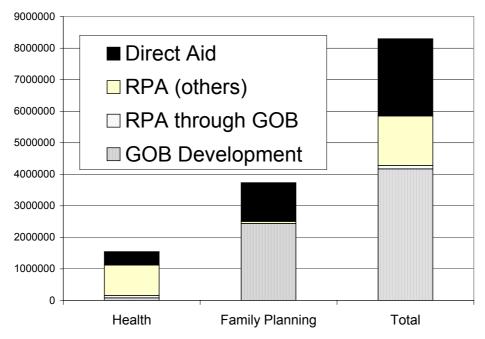


These estimates should be regarded as provisional and, in part, speculative. The HEU will undertake further work in this area to provide more accurate estimates of spending by categories.

## Sources of funding

Figure seven shows sources of funding for both health services and family planning operational plans. Pooled funding (RPA others) mainly support ESP health whilst GOB development funding is spent on ESP family planning

Figure seven: Government and Development Partner Contributions to Health, Family Planning and total development budget. (of MOHFW)



# Gender Equity<sup>2</sup>

It is important that progress of HPSP in reducing gender health inequalities be monitored. HPSP will impact on gender equity through support of the ESP package (particularly services that directly affect maternal health) as well as through wider reforms in health systems reorganisation and development. In some cases, the reforms (such as introduction of user fees) may have a negative impact on gender health gaps (i.e. they may serve to worsen health of women).

The PER can contribute to this monitoring effort by providing expenditure analysis that aids:

- assessments of whether public health spending reflects stated gender policy priorities
- construction of gender health equity indicators, for example, proportion of total spending on core gender priority services, relative benefit to males and females of public spending on different ESP components.

<sup>&</sup>lt;sup>2</sup> Gender equity can best be defined as equal provision and utilisation of health services between males and females according to equal need. However this definition recognises that gender health disparities are also related to women's general poor status in relation to men.

• investigation of spending on priority gender health services by source of funding.

This PER presents a first analysis of whether resource allocation and spending under HPSP reflects stated gender equity policy aims. Annex one provides a fuller discussion of the issues.

#### Expenditures on maternal health

Historically, the health sector has given greater emphasis to family planning and child health services. HPSP aims to re-dress this imbalance by giving priority to services that reduce maternal mortality and morbidity, such as antenatal care, emergency obstetrics care, and adolescent health care. Figure six suggests that:

- ➤ 11% of total ESP (Health and Reproductive Health) operational plan expenditures is on maternal health, compared to 63% for family planning.
- ➤ Proportionate expenditure on maternal health would have been slightly higher (16%) had expenditures been in line with allocations (see annex one).

This provides an important baseline for monitoring maternal health expenditures in future years. To have more meaning, expenditures need to be dis-aggregated on the basis specific maternal health services, as well as by type of expenditure (for example, capital, training, salaries, and drugs and supplies). This will be attempted in future PERs once the new RIBEC codes and pilot initiative with three Line Directors are operational.

#### Sources of funding for maternal health

Both ESP-reproductive health and ESP-health services are roughly equal financial supporters of maternal health (10.4 and 12.9 per cent respectively). This suggests that both GoB and pool funding give equal support to maternal health. Further disaggregations are not available to confirm this supposition.

In the first year of HPSP, EOC was almost totally funded by UNICEF (which represents Direct Project Aid (DPA)). These were largely for start up investment costs (such as equipment, behaviour change communication and training), but also for drugs and supplies. Some procurement of EOC equipment was supported by funds channelled through the World Bank led consortium of development partners.

#### Public Expenditure Benefits Incidence Analysis

Benefit incidence analysis provides an assessment of the distribution of public expenditures of a given programme between men and women and boys and girls. It requires two types of information, expenditure (usually unit costs) and utilisation data (ideally, dis-aggregated by gender, geography and income since poor women are less likely to use services than richer women). Expenditure information should be net of user fee recovery (official fees) since it is important to assess the level of subsidy going to different groups of users. This information then needs to be related to measures of relative health need of men and women.

The last PER (conducted in April 1999) reported on per capita public expenditures on both inpatient and outpatient care at different government health facilities for males and females. It found per capita expenditures were lower on females for outpatient care (taka 43.7 for females compared to taka 49.1 for males), but higher for in-patient care (taka 56 for males and taka 61 for females).

Given the special health needs of women this would suggest that public health subsidy prior to introduction of HPSP was not in proportion to gender needs. Benefit incidence expenditure analysis will be conducted in a future PER to track the extent to which this gender imbalance in public subsidies is being reversed by HPSP for each ESP component. This will enable relative public spending to be estimated separately for services that address special health needs of women compared to those that address common health problems of women and men or boys and girls, such as TB or Acute Respiratory Infection (ARI). In this way like needs can be compared to benefits.

# Patterns of geographical allocation

At first glance there is considerable variation in the per capita expenditures by division with allocations varying from 119 Taka to 207 (see table two). Much of this variation, however, is accounted for by Dhaka division which receives a larger allocation presumably because of the much higher concentration of facilities. Variation across the rest of the country is less marked although it is still worth observing that expenditure in the lowest, Khulna, is only 86 per cent of the expenditure in the highest (outside Dhaka) Barishal. It is also likely that if patient contributions - both unofficial and official – were added then these differences would be more marked since better equipped facilities, particularly in Dhaka, are able to attract much higher payments for services.

Table two: a	ivisionai expenai	ures (1996/9) (	ina measures	oj neaun	siaius		
	1	2	3	4	5	6	7
	capita MOHFW spending	capita GoB plus reimbursed RPA	IMR	CMR	Fertility Rate	CPR	Per cent not vaccinated
Dhaka	207.2	155.6	90.8	130	3.2	50	14.9
Chittagong	126.1	94.7	76.8	131.3	4.1	37	15.5
Rajshahi	119.7	89.5	94.6	126.2	2.8	59	7.3
Khulna	118.6	89	75.2	86.8	2.5	62	3.1
Barishal	137	102.9	86.3	119.5	3.3	49	6.2
Sylhet	125.1	94	138	179.1	4.2	20	22.4
Total	149.5			127.8	3.27	49.2	12
Coefficient of variation [2]	0.25	0.25	0.25	0.23	0.20	0.34	0.63

Table two: divisional expenditures (1998/9) and measures of health status

#### Notes:

- 1. It was only possible to obtain accurate allocations for Government sources of finance and RPA allocations through the Government. For the purposes of this exercise, non Government RPA and DPA allocations were allocated in the same proportion.
- 2. Mean divided by the standard deviation of the data series standardised (independent of unit) data variance.

The most important unanswered question is the extent to which these allocations reflect need for services and to what extent they reflect existing levels of capacity. Examining the indicators of need in columns 3-7 (table two) no clear correlation between allocations and health status of the divisions is apparent. This was confirmed by an earlier HEU research on medical and surgical requisites which suggested that spending on this important non-salary item was determined largely by bed capacity rather than epidemiological indicators of need (HEU, 1998). It is also interesting to note that Sylhet which receives a relatively low allocation has the highest child and infant mortality rate and fertility rate of all the divisions. Financial allocations do not reflect health need, as summarised in these health statistics, very strongly.

Two arguments are conventionally given for preserving the current system of allocations. One is that patients cross divisional boundaries in order to obtain services. Thus expenditure on one division can benefit people living in other divisions. We are unable to verify this possibility but it is clearly an empirical question that deserves examination. It is worth noting, however, that this is an argument used in many countries for preserving the status quo but that has, on closer examination, turned out to be exaggerated.

The second argument is that utilisation is a measure of need for services so that higher use implies higher need. A moments reflection suggests that this is flawed since patients can only express need if services are available. Where services are not available need is un-met and unexpressed in use of services. Demand is, for example, always higher in urban areas not because needs are greater but because the population live closer to services.

More work is evidently required to investigate the determinants of need and extent to which financial allocations should be adjusted to meet them. Further dis-aggregation

into rural and urban allocations should be possible next year with the introduction of the new Thana level RIBEC codes.

# Developing economic indicators for monitoring HPSP

The structural economic and financial indicators used in the early stages of HPSP provide an indication of the inputs into the health sector. They give little indication of the outputs or outcomes (see Ensor and Killingsworth, 1999 for more details). Developing more sophisticated indicators requires both an investment in occasional and regular data collection and the identification of a small number of key output indicators

#### *Information systems*

While it is currently possible to get an estimate of expenditure on ESP services in total allocating this spending to specific ESP components is problematic. This is important since such dis-aggregations are required in order to:

- > evaluate the relative importance placed on each component,
- > obtain unit costs of providing each service, and
- ➤ assess the benefit-incidence of each service for key client groups (e.g. menwomen, children, poor).

Attempts to dis-aggregate spending by types of ESP service and levels of activity have highlighted the fragmented data collection imposed by the separation of the development and revenue budgets. This year it has been possible to partly divide up the development budget by ESP components using operational plans. From next year this division will become more precise with the coding of development expenditure by level three (activity) RIBEC codes. This will not be possible on the revenue side since these codes will not used.

At the same time, the revenue reporting system continues to offer a more precise breakdown of spending by levels of facility. Even these data are only available for all below Thana facilities. This means that it is difficult to measure changes in expenditure patterns as a result of the shift from domiciliary to static community clinics.

The RIBEC pilots also provide an opportunity to obtain more detailed expenditure information. These are likely to be with the ESP health and family planning line directorates and one other, possibly hospitals. Computerisation of records should provide more accurate information at a greater level of dis-aggregation than is possible now and affords the opportunity for measuring benefit-incidence more precisely.

The continued deficiencies and fragmentation in the management information system means that its monitoring must rely heavily on regular survey data. Already the CIET baseline (and later follow-up surveys) offers a rich source of monitoring information (CIET, 1999). This must be supplemented with other surveys. An urgent requirement is for a below-thana facility survey to investigate patterns of resource use at the key

ESP levels and provide unit cost information for ESP components. This is being planned by the HEU for early in the new year.

# Monitoring indicators

Improved monitoring also requires the development of more sophisticated indicators. Economic and financial monitoring should examine whether:

- resources are used in an effective way
- resources are used in a way that is sustainable.
- > care is affordable
- > care is accessible
- > resources favour priority groups

Indicators that can be used to monitor these impacts are summarised in table three. More details are provided in Ensor & Killingsworth, 1999 and Killingsworth, 1999.

Table three: financial and economic indicators for monitoring the HPSP

Type of indicator	Indicator	Means of verification	Status of baseline	Future needs (sources of data)
Financial Resources used in an effective way.	Proportion spent on ESP     Cost per admission     Unit cost per ESP service	<ul> <li>Facility         efficiency         survey (Thanas         and districts).</li> <li>Survey of cost         of components –         Thana and         below.</li> </ul>	<ul> <li>Facility         efficiency         survey         completed.</li> <li>No data         available on         primary level         costs.</li> </ul>	Survey of ESP component costs including staffing. Survey to be carried out by HEU in 2000. Need for repeat survey every 2 years.
Resources used in a way that is sustainable	Annualised recurrent cost of ESP/HPSP.     Proportion of annualise recurrent cost included into the revenue budget.	Analysis of recurrent cost requirements of annual investments.	Some analysis of budget expenditures available. Analysis of actual spending required to reflect actual recurrent cost implications.	Regular analysis of recurrent costs.
Economic				
Affordable care	User cost of services     Full user cost of ESP services	CIET survey, other in-depth survey	CIET data provide general data on extent of payments.	Further need for in depth investigation on the impact of cost.
Accessible care	Average distance to facility offering ESP services of minimum quality.	Household & facility survey including analysis of actual changes in utilisation patterns.	CIET and NIPORT survey both provide data on geographic proximity and quality.	Further analysis of survey data required to investigate determinants of demand.
Resources favouring priority groups	Utilisation per capita     Expenditures per capita  For: pregnant women, geographic distribution, gender balance in non-reproductive ESP services, lowest income quintile in the population.	CIET survey, MIS, RIBEC pilots, facility cost survey	<ul> <li>Figures         available on         utilisation of         children by</li> <li>gender.</li> <li>Further gender         and geographic         division of         utilisation and         per capita         spending.</li> </ul>	<ul> <li>Further analysis of survey data.</li> <li>HEU facility costing study.</li> <li>Analysis of geographic spending using Thana level RIBEC codes.</li> </ul>

#### References

Barkat A. Howlader S.R. & P. B. Chakma (1999) <u>Activity and cost analysis of essential health and family planning services in Bangladesh</u>, University Research Corporation.

Ensor T. & Killingsworth J. (1999) <u>Economic indicators for monitoring the HPSP</u>, Health Economics Unit Occasional Paper, Policy Research Unit, Ministry of Health and Family Welfare.

Health Economics Unit (1998) <u>Rethinking MSR allocation and financing mechanism in the health sector of Bangladesh</u>, Health Economics Unit, Occasional Paper, Ministry of Health and Family Welfare.

Killingsworth J. (1999) <u>Efficiency monitoring of Output</u>, Policy Research Unit, Occasional Paper, Ministry of Health and Family Welfare.

# Annex 1: Gender Equity Analysis

#### Introduction

HPSP aims to target women, children and the poor mainly through ESP delivery. It acknowledges the need to address the existing imbalance in health status between men and women, especially through the provision of services directed at the special health needs of women (which largely relate to their reproductive capacity).

It is important to track whether these stated gender and equity priorities are actually reflected in resource allocation and spending patterns. Of course, allocation of resources to gender related services does not in itself guarantee improvements in gender health. Financial inputs need to be converted to outputs (or services), which in turn need to be utilised effectively to produce better health outcomes. Ideally, it is this chain of events that needs to be tracked in order to assess whether HPSP is succeeding in reducing gender health inequalities. The PER provides an opportunity to contribute to this monitoring effort. The PER also serves as a valuable tool for raising gender issues more widely, for facilitating wider discussions on gender health priorities whilst at the same time strengthening management and accountability of public expenditure (Evers, 1999).

This annex introduces concepts and issues related to integration of gender perspectives in a PER. It begins to identify information needs and their availability, briefly introduces and reviews existing tools and methodologies for the collection of relevant data and presents some preliminary gender equity analysis of public health expenditures<sup>3</sup>. It aims to inform the development of a framework for the wider integration of gender perspectives in PERs that can guide future PERs<sup>4</sup>.

#### **HPSP and Gender Equity**

Gender equity is concerned with the differences in health status between women, men, girls and boys that may arise as a result of unequal provision and utilisation of health services relative to need<sup>5</sup>. It is also concerned with the gender(ed) nature of health sector institutions and structures, in terms of the numbers of female and male staff employed, their working conditions and relative participation in decision-making

<sup>&</sup>lt;sup>3</sup> This draws on the work of Barbara Evers, a consultant funded by the Netherlands Embassy to support HEU incorporate a gender analysis in the PER (see her consultancy reports: Assessments of Health Sector Expenditure Formats for Gender and Equity Sensitive Information and Analysis in MOHFW (Part I (July 1999) and II (November 1999)) and Note for integrating Gender and the Public Expenditure Review, HPSP (November 1999).

<sup>&</sup>lt;sup>4</sup> HEU will bring out a more comprehensive paper on "Integrating gender equity analysis in the PER" in January 2000.

<sup>&</sup>lt;sup>5</sup> It recognises that better targeted quality health services are not sufficient to address existing inequalities in health status of women and men. Poor health status of women in Bangladesh is related to broader gender inequalities and their poor status compared to men.

roles. HPSP will impact on gender equity through its support of the essential service package and select health systems development and reform efforts. Health sector reorganisation and reforms strategies proposed in HPSP such as the unification of health and family welfare directorates, and introduction of user charges will impact on both aspects of gender equity described above. With regards the ESP, gender impact will be influenced by the contents of the package (i.e. what is included) and the degree to which it meets gender health priorities.

# Monitoring Gender Equity

Information needs and their availability

As already mentioned, monitoring the impact of HPSP on gender health inequalities requires tracking of financial inputs and linking them to outputs (usually in the form of health services and their utilisation) and outcomes (in the form of better health for women). This cause effect relationship is difficult to verify for a number of reasons, including time lag, problems of attribution etc. (refer to HEU general paper on monitoring economic indicators for HPSP). As a result of these problems, proxy indicators of impact are usually used. This notes ends with some suggested financial and economic indicators to help monitor gender equity in HPSP.

Availability of data for tracking financial inputs, and service outputs for better gender health outcomes are briefly reviewed.

#### Financial allocations and expenditures

A comprehensive analysis of the gender dimensions of public health expenditure requires the breakdown of all public expenditures and the identification of cost centres that are most likely to reduce gender health gaps. In reality, it is easier to approach the task in the reverse, that is first identify priority services and strategies (that are most likely to impact on gender inequalities, for example antenatal care or human resource development activities) and then estimate the level of allocation or spending to these services and activities.

Existing financial information systems make it difficult to track expenditures on specific services and activities. Although the new RIBEC cost codes will allow expenditures to be tracked on the basis of broad ESP components from financial year 1999/2000, they do not support monitoring of expenditures on individual services within each ESP component, for example antenatal care within the maternal health care component. In addition, the fragmented nature of the health budget (into revenue and development components) means that a meaningful gender analysis of public health expenditures can only be undertaken on the development budget (as a result of the RIBEC reforms). Since it is unrealistic to expect the routine financial information to yield further gender relevant cost disaggregations nor expect the revenue and development budgets to merge in the near future other methods of estimating expenditures on gender priority services will need to be developed.

<sup>&</sup>lt;sup>6</sup> Some scope does exist for capturing further gender related service expenditures breakdowns through the RIBEC pilots planned with three key HPSP line directors.

#### Service outputs

On the service output side, the new unified management information system will allow some monitoring of outputs in the form of service utilisation on the basis of gender. However, it is not able to disaggregate utilisation of child health services by girls and boys. The CIET survey provides some information on utilisation of child health services by gender. Also the Thana Health Complex and District Hospital tend to report service utilisation on an aggregate basis. Routine facility information systems will need to be supplemented by household and other sample surveys.

#### Health outcomes

The main source for health status indicators (such as infant mortality, maternal mortality etc) will be the demographic health survey which is conducted every two years.

#### Tools For Gender Analysis Of Budgets

A number of tools are available to aid gender integration in PERs including Policy Appraisal and Public Expenditure Benefits Incidence Analysis <sup>7</sup>. Data are not yet available to make comprehensive use of these tools. Instead some initial analysis is possible together with the development of a framework for future policy appraisal. In addition, an attempt is made to construct some proxy indicators to enable the tracking of financial inputs to outputs to outcomes that reduce gender gaps.

#### Gender aware policy appraisal

Broadly this asks in what way are the policies and their associated resource allocations likely to reduce or increase gender inequalities. This requires the identification of services and activities which will most reduce gender health gaps (core priority gender services) and estimation of proportionate allocations and spending on these services. For this PER, a few key HPSP documents<sup>8</sup> were reviewed to identify priority gender services. For future PERs, priority services will be identified through consultations with womens' NGOs, communities, and will take guidance from the gender strategy currently being developed by the Gender Issues Office (GIO).

#### Core gender health services

In reviewing the achievements of the Bangladesh Health and Family Planning Programme over the last two decades the PIP concludes that "while progress has been satisfactory with respect to reduction in fertility and child mortality, it has been inadequate with respect to maternal mortality and morbidity" (Page 1). HPSP, therefore, gives priority to the improvement of maternal health status. In particular,

<sup>&</sup>lt;sup>7</sup> Tools to aid integration of gender into PERs include: Policy Appraisal, Beneficiary Assessments of Service Delivery, Public Expenditure Benefit Incidence Analysis, User Charge Incidence Analysis, Analysis of impact of the Budget on Time Use, and Medium Term Economic Policy Framework –see How to do a gender sensitive budget analysis: contemporary research and practice, Budlender and Sharp, Commonwealth Secretariat 1998.

<sup>&</sup>lt;sup>8</sup> HPSP PIP, Aide Memoire for APR April 1999, Mainstreaming Gender in the Bangladesh Health Sector, Rachael Tolhurst May 1999-11-18

Safe Motherhood Services have been broadly identified as a priority. Another priority maternal service is maternal nutrition.

Historically, health programmes have given emphasis to family planning and child health services. It will be important to track the shift in policy emphasis (and resource allocation) towards maternal health services. One way of doing this is to examine expenditure patterns. This PER aims to provide a baseline for the first year of HPSP. It should be noted that this analysis is only partial since the structure of the revenue budget did not allow an estimation of expenditures on maternal health. Also, it was only possible to undertake a meaningful analysis of allocations and expenditures related to two operational plans (ESP Health and ESP Reproductive Health). These represent just over 60 per cent of total ESP expenditures under the development budget. Despite these data limitations it is still a valuable indicator of the direction of policy shift under HPSP.

Financing and expenditures

Table A1: Allocation and Expenditures on ESP components (1998/99) - Crore

1 или								
	ESP (F		,	eproductive ealth)				
	Allocation	Expenditure	Allocation	Expenditure	Total expenditure	Expenditure as per cent of total	Allocation as percent of total	Expenditure as percent of allocation
Reproductive Health								
FP Services			373	334	334	63.2%	55.2%	89.5%
Maternal health	47.22	19.96	58.8	38.9	58.86	11.1%	15.7%	55.5%
Child Health and Limited								
Curative Care	144.5	118.2			118.2	22.4%	21.4%	81.8%
Communicable Disease	11.7	7.9			7.9	1.5%	1.7%	67.5%
Support Service and								
Coordination	30.9	8.31	1.8	0.96	9.27	1.8%	4.8%	28.3%
STD/AIDS	7.8	0.06			0.06	0.0%	1.2%	0.8%
Total	242.12	154.43	433.6	373.86	528.29	100.0%	100.0%	78.2%

Note on source: These represent revised expenditures from the ESP Line Directors.

Maternal spending represents 11 per cent of total ESP (health and reproductive health) operational plan expenditures, compared to 55 per cent for family planning. Proportionate expenditures on maternal health would have been slightly higher had expenditures been in line with allocations. In contrast development expenditures on family planning expenditures were almost on target.

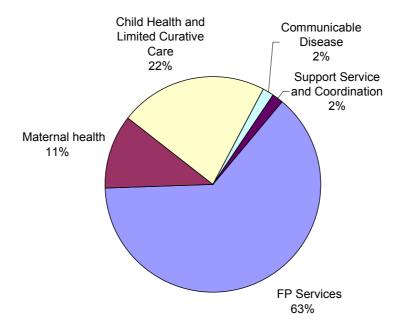


Figure A1: Division of development spending by ESP sub-component for ESP Family Planning and health directorates.

A more complete estimation of maternal health expenditures compared to other ESP components will be attempted in future PERs, including revenue expenditures as well as other non-ESP delivery development expenditures.

It would be useful to be able to track expenditures on specific maternal health activities, particularly on Emergency Obstetric Care (EOC) (given the priority accorded to it by HPSP). Expenditures on specific ESP services should be broken down by capital, training, salaries and non-salary components. This will be attempted through the RIBEC pilot with the Line Director (ESP), DGHS.

The ESP package contain other non-maternal health services which are important for reducing gender health gaps, for example treatment of TB and Reproductive Tract Infections (RTIs). Problems of unequal access/utilisation males and females mean that even if resources allocated to common health problems males are likely to gain unequally (see benefits incidence analysis below). This makes it important to track financial inputs to measures of output. Violence against women is a serious health problem for women in Bangladesh, but at present it is not possible to monitor how much is spent on services to address this health problem, nor is it possible to monitor utilisation of health facilities for treatment of injuries arising from assault. Future PERs need to investigate this

Other HPSP strategies also have an important bearing on gender health gaps, for example Human Resource Development, and the Organisational Change Management efforts. For example, unification of health and family welfare wings will have an important bearing on status of males and females within the unified structure.

#### Sources of funding

Both ESP-reproductive health and ESP-health services are roughly equal financial supporters of maternal health (10.4 and 12.9 per cent respectively). This suggests that both GoB and pool funding give equal support to maternal health. Further disaggregations are not available to confirm this supposition.

In the first year of HPSP, EOC was almost totally funded by UNICEF (which represents Direct Project Aid (DPA). These were largely for start up investment costs (such as equipment, behaviour change communication and training), but also for drugs and supplies.

# Public Expenditure Benefits Incidence Analysis

This provides an assessment of the distribution of public expenditures of a given programme between men and women and boys and girls. It requires two types of information, expenditure (usually unit costs) and utilisation data (ideally, disaggregated by gender, geography and income since poor women are less likely to use services than richer women). Expenditure information should be net of user fee recovery (official fees) since it is important to assess the level of subsidy going to different groups of users.

The last PER (conducted in April 1999) reported on per capita public expenditures on both inpatient and outpatient care at different government health facilities for males and females. It found per capita expenditures were lower on females for outpatient care, but higher for in-patient care. This kind of information needs to be related to relative health needs of males and females. For example, assuming that women's health needs are greater (given their special reproductive health needs) the above findings would suggest that public expenditures in 1996/97 were heavily favouring men. It would be important to see how the study accounted for family planning service contacts. Were the beneficiaries of family planning the users (who are almost all female)? if so then this would have greatly biased the above statistic.

Benefit incidence expenditure analysis needs to be conducted for each ESP component. In particular, it would be important to assess benefit incidence for service that are aimed at both men and women, for example communicable diseases or child health services so that like needs can be compared to benefits.

#### Cost data

Unit cost estimates for individual ESP components are available from a study commissioned by the HEU<sup>9</sup>. However, estimates are based on a sample of only four thanas and, therefore, difficult to extrapolate. The costing study planned by HEU should provide more reliable cost estimates for a future public expenditure benefit incidence analysis.

#### Utilisation

New unified MIS will capture most utilisation on basis of gender (with exception of child health services), but not on the basis of income. Possible sources of

<sup>&</sup>lt;sup>9</sup> Estimating costs of health and family planning services, Barkat et al, 1999.

gender/income/geographic utilisation of ESP services are the Service Delivery Survey conducted by CIET and BBS Health and Demographic Survey.

# Indicators for monitoring gender equity

In order to assess impact of HPSP on gender health inequalities, financial inputs need to be linked to measures of service outputs, which in turn need to be linked to relative gender health outcomes. This is difficult to do in practice and requires use of proxy indicators. The table below maps outs some indicators that would be useful to track financial inputs, outputs and health outcome.

Fina	ncial	Service Output	Health Outcome		
Per capita public	Cost to user,	Utilisation of ESP	Life Expectancy		
spending on	including official	services by gender,	men and women		
different ESP	and un-official	income, age and			
components	fees, transport etc	geography	Maternal mortality		
(Reproductive	for different ESP				
Health,	services		Child mortality and		
Communicable			morbidity of boy		
Disease Control,			and girls		
Child Health etc)					

The above information would allow estimation of public expenditure benefit incidence analysis for different ESP services, on basis of gender, income, age and geography.

Annex 2: Health and Population Allocation and Expenditure in Five-Year Plans (Crore taka)

Categories	First FYP (1973-78)	Two Year Plan (1978-80)	Second FYP (1980-85)	Third FYP (1985-90)	Fourth FYP (1990-95/97)	Fifth FYP (1997-2002)
Total FYP Allocation	3952	3261	16060	25000	34700	85894
Health and FW Allocation	147.8	117.6	781.0	1420.0	2658.0	9086.2
Share of H&FW Allocation in Total FYP Allocation		3.61%	4.86%	5.68%	7.66%	10.58%
Total FYP Expenditure	1635	2402	13929	16757.3	32244	
Health & FW Expenditure	133.17	114.57	717	917.5	2499	n.a.
Share of H&FW Expenditure in Total FYP Expenditure		4.77%	5.15%	5.48%	7.75%	n.a.

Source: Various Five -Year Plans

Annex - 3: Table: Per Capita Expenditures by MOHFW, 1991/92-1998/99

Period	Per capita Expenditure Welfare	es on Health and Family	Share in GDP
	At current price	At constant price (1990-91=100)	
1991-92	49.2	46.9	1.09
1992-93	64.2	59.7	1.24
1993-94	76.3	68.7	1.33
1994-95	84.7	70.1	1.39
1995-96	116.6	90.5	1.23
1996-97	140.5	106.4	1.16
1997-98	174.5	123.5	1.40
1998-99	149.5	103.4	1.20

Source: Status of Health and Equity in Bangladesh: Policy Perspective, 1998 and HEU Estimates

<sup>\*</sup> The figures are based on the prices of the first year of the Five-Year Plans

Annex – 4: Trends in MOHFW Revenue and ADP Expenditures (Crore Taka)

Allilex - 4. Helius III Monriv Revellue alla Adr Expellatules (Clore Laka)	v nevenue	י מווט אר	ir Expe	nditures	(Clore	ana)						
Years	1993/94		1994/95		1995/96		1996/97		1997/98		1998/99	
Categories	Allocation Expend.		Allocation	Expend.	Allocation Expend	Expend.	Allocation Expend		Allocation Expend	Expend.	Allocation Expend.	Expend.
Total GOB Revenue*	7,063	7,595	8,555	9,623	10,073	10,751	11,497	11,908	14,544	13,108	14,708	14,596
MOHFW Revenue	431	504	575	593	989	647	711	733	776	786	851	876
MOHFW Share in Total Revenue	6.1%	%9.9	%2'9	6.2%	%8.9	%0.9	6.2%	6.2%	5.3%	%0.9	2.8%	%0.9
Total GOB ADP	6.740	8.549	9.460	9.589	11,011	9.507	11.875	11,115	12.890	12.324	13.695	14,122
MOHFW ADP	523	569	768	781	897	812	953	1,025	1,131	1,112	1,272	981
MOHFW Share in Total ADP	7.8%	%2'9	8.1%	8.1%	8.1%	8.5%	8.0%	9.5%	8.8%	9.0%	9.3%	%6.9
Total GOB Expenditure (revenue & ADP)	13,803	16,144	18,015	19,212	21,084	20,257	23,372	23,023	27,434	25,432	28,403	28,718
Total MOHFW Expenditure (Revenue & ADP)	954	1,072	1,343	1,374	1,583	1,459	1,664	1,758	1,907	1,898	2,123	1,857
MOHFW Share in Total GOB Expenditure	%6.9	%9.9	7.5%	7.2%	7.5%	7.2%	7.1%	7.6%	%0.2	7.5%	7.5%	6.5%

Source: Various issues of Budget documents and ADP reports, and MAU for 1998/99

\*Includes only the revised Revenue Account expenditure of the non-development budget and not the Capital Account.

\*\*Revised Budget Estimates (includes actual expenditure of 3 quarters and estimate of the last quarter).

<sup>\*\*\*</sup> The original budget being 1313.57, where Tk.415 was considered as GOB Development expenditure. Tk.410 cr was the approved budget through the operational plan

Annex –5: GOB and Donor Expenditure in MOHFW Financing and for all Government

(Crore Taka)

						(Crore	1 akaj	
Categories	1993/94	1994/95	1995/96	1996/97	1997/98		1998/99	
						PIP	Budget	Exp.
Total MOHFW	1072.4	1373.7	1458.9	1758.2	1897.9	2069.7	2160.0	1856.9
Expenditure								
(Revenue & ADP)								
GOB Contribution	691.7	947.9	960.0	1142.8	1208.9	1434.1	1298.3	1227.8
in MOHFW								
Expenditure								
(Revenue & ADP)								
Total Donor	380.7	425.9	500.4	617.1	688.9	635.6	861.7	629.2
Contribution in								
MOHFW								
Expenditure								
GOB Share in	64.5	69.0	65.8	65.0	63.7	69	60.1	66.1
Total MOHFW								
Expenditure								
Donor's Share in	35.5	31.0	34.3	35.1	36.3	31	39.9	33.9
Total MOHFW								
Expenditure								

Source: Various budget documents and ADP, MAU, RIBEC, PCC. PIP, Part II

Annex - 6: Government and Donor's Contribution in the MOHFW Expenditure and Allocation for 1998/99 in Health and Population Sector. (Crore taka)

	Re	evenue		Developmen	t		Total	
	Budget (1)	Expenditure (2)	Approved budget (3)	Revised budget (4)	Expenditure (5)	Approved budget allocation (1+3)	Revised budget (1+4)	Expenditure (2+5)
GOB	851.5	876.0	410.3 (32.3%)	410.3 (38.4%)	351.7 (35.9%)	1261.8 (59.4%)	1261.8 (59.4%)	1227.7 (66.2%)
				Made up of:				
Reimbursable Programme Aid (through GOB) [1]				94.7	94.7			
Reimbursable Programme Aid (other) [2]				299.9	289.7			
Direct Programme Aid [3]				263.7	244.8			
Total Programme Aid	-	-	861.8 (67.7)	658.3 (61.6)	629.2 (64.1)	861.8 (40.5%)	658.3 (40.6)	629.2 ((33.8)
Total	851.5	876.0	1272.1	1068.6	980.9	2123.6	1919.7	1856.9

#### Notes:

- 1. Reimbursable Programme Aid (GoB) directly reimbursed by development partners to GoB to the value of 12 per cent of GoB allocations
- 2. Reimbursable Programme Aid (other) pooled funding allocated by the donor consortium.
- 3. Direct programme Aid other bilateral aid from development partners.

Source: MAU, PCC

Annex 7: Distribution of total for Salary and Non-salary recurrent and for capital expenditures, 1998/99 (Crore taka)

	1				
				Total	
Categories	Revenue	Development	PIP	Expenditure	
	(1)	(2)	(3)	(1+2)	
1. Recurrent	793.4	662.7	1599.7	1456.1	
	(91.6)	(67.5-82.2)	(77.3)		
A. Salary	581.5	246.5	976.2	828.0	
	(73.3)		(61)		
B Non-Salary	211.9	416.2	623.5	628.1	
	(24.7)		(39)		
2. Capital	82.6	175.0	469.9	257.6	
	(9.4)	(17.8-32.4)	(22.7)		
Total Sector	876.0	837.8	2069.6	1713.8	
(Available			(100)		
Breakdown)					
Total Sector	876.0	980.8	2069.6	1856.9	
(Actual)				1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -	
(Actual)					

Source: MAU

<sup>\*</sup> The balance of 143.1 cr. Taka from the actual is aggregated as DPA and is not divided into Capital vs. Recurrent and Salary vs. Non-Salary. It is, therefore, not possible to show their proportion in different categories. DPA includes both Non Salary components and Capital Items.

Annex 8: Development expenditure of MOHFW by operational plan and ESP Non-ESP breakdown for 1998/9 (core Taka)

Operational Plan Weights Non-ESP Expenditure for ESP (000s) ESP ESP- DG Health Services 154.57 154.57 ESP- DG Family Planning 373.23 373.23 Procurement, Storage and Supply - DGHS 0.2 29.30 117.18 146.48 0.72 Procurement, Storage and Supply-DGFP 16.82 6.54 23.36 Unified MIS-DGHS 2.45 2.45 Unified BCC- DGFF 6.59 0.8 5.27 1.32 9.28 0.8 7.42 1.86 In-service Training-DGHS HRM-DGHS 0.08 0.08 HRM-DGFP 0.03 0.03 **Hospital Services** 0.001 0.02 21.94 21.96 Nursing 1.14 1.14 Quality Assurance 2.83 2.83 Pre-Service Education 7.14 7.14 Planning, Research and Environmental Health - DGHS Research & Development - DGHS 0.71 0.71 Sector Wide Program Management - DGHS 0.08 0.08 Environmental and Occupational Health - DGHS 3.88 3.88 Planning and Research - DGFP Research and Development - DGFP 0.13 0.13 Sector Wide Management - DGFP 0.04 Sector Wide Management - MOHFW 16.40 16.40 14.12 BINP 0.79 53.12 67.24 Nutrition (Micronutrient Supplementation) - DGHS 0.78 0.88 0.69 0.09 Provision of alternative medical care (Unani & Ayurvedi) CMMU 0.36 43.21 76.81 120.02 0.56 Improved Financial Management - DGHS 0.23 Improved Financial Management - DGFP 0.23 Reorganisation of Service Delivery (MCU) 0.36 0.93 2.57 1.65 Health Economics 6.50 0.46 2.99 3.51 Policy Research Unit, MOHFW Regulation, MOHFW Inter-sectoral/Multi-sectoral Co-ordination, MOHFW Drug Administration, MOHFW HRM-MOHFW 0.28 0.14 0.04 0.10 968.42 280.82 Total: 687.60

Note: these figures and the division were obtained from a different source than provided figure for earlier tables. This accounts for the slight discrepancies between the tables.

*Annex 9:* Revenue Expenditure by ESP and Non-ESP categories by Tiers of Service under MOHFW for 1998/99 (Crore taka)

Tiers	Total Expenditure	Share of ESP	Share of Non-ESP
Thana & below	382.4	382.4	0
District Level	306.0	92.0	214.7
Medical Education	38.4	6.4	31.9
Institutes			
Divisional Institutions	2.1	1.1	1.0
Secretariat	90.1	31.6	58.5
DG Office	18.5	10.3	8.2
Others	37.7	0	37.7
Total	876.0	523.8	352.2
Share in Allocation	100.0	59.8	40.2

Annex 10: Development expenditure by source and operational plan (Million Taka)

Annex 10: Development expenditure by source	pment	expenc	iture D	/ Sourc	and c	operational		an (MIII)	plan (Million Taka)	<i>a)</i>					
1,000	0 Yearly Budget					GOB Development	lopment	RPA Through GOB		Other RPA		DPA		Total	
Operational Plan	809	RPA (GOB)	RPA (Others)	DPA	Total	Release	Expenditu Release re	Release	Expenditu Release re		Expenditu Release re		Expenditu Release re		Expenditu re
ESP- DG Health Services	137	7 110	813	1,361	2,422	137	81	110	62	626	959	426	426	1,633	1,546
ESP- DG Family Planning	1,845	5 554	173	1,255	3,827	2,806	2,442	0	0	166	64	1,349	1,227	4,320	3,732
Procurement, Storage and Supply - DGHS	- 614	16	98	268	1,285	614	112	16	~	98	0	268	450	1,285	563
Procurement, Storage and Supply- DGFP	- 271	12	41	15	311	261	229	17	4	0	0	0	0	277	234
Unified MIS-DGHS	8	8	89	င	87	8	9	8	2	25	17	0	0	40	25
Unified BCC- DGFP	6	9 24	1 51	99	150	6	9	24	10	26	0	20	20	109	99
In-service Training-DGHS	12	2 10	203	126	350	12	7	0	0	338	78	0	0	320	85
HRM-DGHS	0	0	6	4	13	0	0	0	0	6	_	4	0	13	_
HRM-DGFP	0	0	6	2	11	0	0	0	0	0	0	0	0	0	0
Hospital Services	333	0	) 46	349	728	333	85	14	3	34	0	347	131	728	220
Nursing	12	14	0	33	28	12	7	14	4	0	0	0	0	26	11
Quality Assurance	0	0 (	6 (	7	16	0	0	0	0	6	0	7	8	16	3
Pre-Service Education	94	9 1	9	53	158	94	29	9	0	9	2	53	0	158	71
Planning, Research and Environmental Health - DGHS	0 p	0 (	0 (	0	0	0	0	0	0	0	0	0	0	0	0
Research & Development - DGHS	0	4	44	9	54	0	0	4	-	44	2	9	2	22	2
Sector Wide Program Management - DGHS	ıt 0	0 (	2	_	3	0	0	0	0	2	0	_	1	3	
Environmental and Occupational Health - DGHS	0   18	0	14	09	74	0	0	13	0	61	0	09	68	134	39
Planning and Research - DGFP	0	0 0	0 (	0	0	0	0	0	0	0	0	0	0	0	0
Research & Development - DGFP			13	2	17	2	_	0	0	0	0	0	0	2	_
Sector Wide Program Management - DGFP	ıt 0	0 (	1	-	2	0	0	0	0	0	0	0	0	0	0
Sector Wide Management - MOHFW	_	0 /		22	125	7	4	0	0	62	0	22	14	125	18
BINP	2	9 0	885	10	868	10	4	0	0	150	388	14	9	272	398
Nutrition Supplementation) - DGHS	ıt 0	0 0	0	21	21	0	0	0	0	0	0	8	8	80	œ
Provision of alternative medical	3	3	0	0	4	0	0	0	0	0	0	0	0	0	0

care (Unani & Ayurvedi)															
СММU	794	482	176	0	1,453	1,176	1,115	0	0	25	25	0	0	1,233	1,173
MAU	3	0	4	12	19	3	2	_	0	_	0	3	3	8	9
Improved Financial Management - DGHS	0	0	2	~	က	0	0	0	0	0	0	0	0	0	0
Improved Financial Management - DGFP	2	_	-	0	4	2	2	~	0	0	0	0	0	3	2
Reorganisation of Service Delivery (MCU)	0	0	45	0	45	0	0	0	0	0	0	45	26	45	26
Health Economics	0	2	0	34	32	0	0	2	1	0	0	02	64	71	92
Policy Research Unit, MOHFW	0	0	20	0	20	0	0	0	0	0	0	0	0	0	0
Regulation, MOHFW	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0
Inter-sectoral/Multi-sectoral Coordination, MOHFW	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0
Drug Administration, MOHFW	0	0	-	0		0	0	0	0	0	0	0	0	0	0
HRM-MOHFW	0	0	11	2	16	1	1	0	0	0		0	0	1	1
Total:	4,150	1,245	2,775	4,046	12,216	5,486	4,172	230	108	2,637	1,571	3,064	2,448	11,417	8,298