

A PUBLIC EXPENDITURE REVIEW OF THE HEALTH AND POPULATION SECTORS

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Glossary of Abbreviations

PHC	Primary Health Care
NRR	Net Replacement Rate
GOB	Government of Bangladesh
PER	Public Expenditure Review
ADP	Annual Development Programme
TFR	Total Fertility Rate
HEU	Health Economics Unit
CIRDAP	Centre on Integrated Rural Development for Asia and the Pacific
MOHFW	Ministry of Health and Family Welfare
CDR	Crude Death Rate
CBR	Crude Birth Rate
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
EPI	Expanded Programme on Immunisation
PP	Project Proforma
TAPP	Technical Assistance Project Proforma
CPR	Contraceptive Prevalence Rate
GDP	Gross Domestic Product
WB	World Bank
UNICEF	United Nations Children Fund
HAPP-5	Fifth Health and Population Programme
HPSS	Health and Population Strategy
ESP	Essential Services Package
NGO	Non Governmental Organisation
FPHP	Fourth Population and Health Programme
Kcal	Kilo Calorie
STD	Sexually Transmitted Disease
RTI	Reproductive Tract Infection
HIV	Human Immuno Virus
AIDS	Acquired Immune Deficiency Syndrome
VAT	Value Added Tax
RIBEC	Reforms in Budgeting and Expenditure Control
ASAPR	Annual Sustainability Assessment and Policy Review
NHA	National Health Accounts
ICPD	International Conference on Population and Development
BBS	Bangladesh Bureau of Statistics
WHO	World Health Organisation
IBRD	International Bank for Reconstruction and Development

Executive Summary

Against the backdrop of Fifth Health and Population Programme (HAPP-5), it is vital to look at the historical expenditure patterns and their contribution to the improvement of the health and population sector goals of Bangladesh. This retrospective public expenditure review (PER) by the Health Economics Unit (HEU) allows policymakers and researchers to find gaps in target achievements while shedding light on how best to prioritise health and population programme components within a limited budget availability.

This PER is a follow-up of the last PER conducted by HEU in 1995. There has been a substantial increase in investments in health and population sectors since the last PER. A closer look at the investment pattern reveals that much of the increased investment in health came from the GOB. Population investment has also seen an expansion, though much of it has come from the development partners side (See Table 1). Some of the targets for the GOB Fourth Five Year Plan were achieved well before the plan period ended. Concurrently, some other indicators achieved very little success against their targets, which in a way marred the overall feat.

Table 1: Selected information on Health and Population sector (Taka Million)

	1993/94	1994/95	1995/96	1996/97	1997/98
Health Revenue	117.14	136.64	147.17	162.38	163.22
Health ADP	66.47	79.81	103.78	138.82	134.12
Population Revenue	8.86	9.82	11.08	11.73	11.26
Population ADP	89.15	111.13	115.82	111.99	124.15
Health ADP:					
Share of GOB funding	41%	61%	49%	41%	42%
Share of donor funding	59%	39%	51%	59%	58%
Population ADP:					
Share of GOB funding	32%	34%	34%	40%	36%
Share of donor funding	68%	66%	66%	60%	64%
PHC Funding in Health from ADP:					
Share of GOB funding	36%	57%	42%	32%	30%
Share of donor funding	64%	43%	58%	68%	70%

Sources: Various issues of Revenue Budget, ADP Publications and HEU Estimates.

The PER is divided into five major sections. After a brief introduction and statement of methodology in Section A, Section B and C provide an overview of the health and population sub-sectors. In each case, objectives of health and population sub-sectors are evaluated against their achievements to date in conjunction with an examination of current and past public expenditure trends. The PER presents expenditure trends in multiple formats while disaggregating data as much as possible. Section D examines the equity of public expenditures in the health and population sector, with special concern for the equity of current health and population investments. Section E of the study looks at the future resource envelope of the health and population sector in order to provide a clear picture of domestic resource availability for the sector during HAPP-5. Finally, conclusions and recommendations are provided for policymakers and planners to assist the GOB planning process.

A brief summary of the main findings of the PER is enclosed.

Health

Over the last five years, the GOB has substantially increased its funding of the health sub-sector through higher allocations in the GOB's Annual Development Programme (ADP) and Revenue Budget (See Table 1). This higher allocation has resulted in improvement in some health related indicators. However, indicators relating to reproductive and maternal health have not performed well despite higher investments. The share of GOB's ADP funding towards primary health care (PHC) activity dropped from around 53 percent in 1993/94 to 41 percent in 1996/97. Similarly, the share of PHC in the Revenue Budget declined from around 50 percent in 1993/94 to 47 percent in 1996/97. So, why is there a marked decline in PHC funding? Should not GOB increase its funding for PHC activity, as it is the main objective of the forthcoming HAPP-5? It is worth finding those non-PHC ADP projects that were financed at the cost of PHC. In the Revenue Budget, PHC funding dropped partly due to increased funding of other activities like administrative and planning operations of the Ministry. The last five years have also seen higher ADP contributions by the development partners to the health side of the sector. The share of development partner contribution to PHC has actually increased from 64 percent in 1993/94 to around 70 percent in 1997/98. In addition, capital expenditures in the ADP have

increased to around 91 percent of the total health ADP in 1997/98, while recurrent expenditures have declined to a modest 8 percent from a staggering 18 percent in 1993/94.

Population

The population sub-sector has observed some remarkable achievements in terms of reduced population growth rate, increased contraceptive prevalence rate (CPR) and decreased total fertility rate (TFR). Nevertheless, these achievements, made possible by the combined efforts of GOB and foreign development partners, need to be consolidated and sustained if Bangladesh is to achieve replacement level fertility.

The population sub-sector has clearly benefitted from increased funding by the GOB and its development partners. Funding has increased in both the ADP and Revenue Budget, although increases in the Revenue Budget were marginal (See Table 1). The GOB has effectively increased its share in the ADP funding of the population activities (from 32 percent in 1993/94 to around 40 percent in 1996/97), as it indicated in the Paris Conference of 1995, and the trend suggests that the share will continue to increase in the future. The picture for recurrent expenditure is less promising, since much of the recurrent activities of the ADP remains donor funded, despite a nominal increase in the share of GOB funding of the recurrent activities during the last five years. In terms of financial sustainability, the GOB should increase its share of funding recurrent activities, since there are strong indications that development partners will reduce funding for such activities in the future.

Future Resource Availability

In order to implement the forthcoming Fifth Health and Population Programme (HAPP-5), there is a need to mobilise additional resources. The resource envelope estimates suggests that at the macro-economic level, the GOB will continue to face a resource imbalance during the HAPP-5 years. This overall resource imbalance will clearly put pressure on the GOB to allocate required funds to the health and population sector during HAPP-5. Therefore, GOB should start adopting various resource mobilisation schemes such as direct cost recovery, social health insurance,

health trust, etc. to mobilise additional resources. It is worth noting that in order to finance HAPP-5, additional resources need to be mobilised beyond the health and population sector. For that matter, GOB think of redirecting part of the resources employed in other less priority sectors to health and population sector.

A. Introduction and Methodology

The Bangladesh Health and Family Welfare Programme has made remarkable progress over the last two decades. Fertility transition is well underway and the success of the immunisation programme is regarded as impressive. Most health and population indicators show significant improvements in health and family planning status for the country.

Despite satisfactory progress in the reduction of fertility and childhood mortality, progress remained inadequate with respect to maternal mortality and morbidity. Other issues of prime concern are the overall poor utilisation of government services as well as the cost-effectiveness, sustainability, and global equity, and gender equity in particular.

To address these issues effectively and to move to a sectoral approach in delivering health care services to the poor — especially women and their children, the GOB has adopted a Health and Population Sector Strategy (HPSS). The main objectives of the HPSS are as follows:

- Reduction in morbidity, mortality, fertility, and the burden of communicable diseases;
- Targetting the underserved segment of the population, especially women and their children;
- Client-centred reproductive health approach to meet client needs rather than demographic targets;
- Promotion of stakeholder participation;
- Ensuring the equity of access, and the efficiency of service;
- Providing an essential package of services (ESP) to meet the health and family welfare demands of the vulnerable group;
- Reiterate the GOB's commitment for higher allocation to the health and population sectors;
- Expanded cost recovery measures in the public sector to minimise the resource constraint with due attention given to the equity impact of such initiative;
- Promotion of private sector and NGO participation to complement the GOB services.

HPSS objectives are to be implemented during the Fifth Health and Population Programme (HAPP-5) and preparation for HAPP-5 implementation are well underway. As

part of the HAPP-5 preparation process, this Public Expenditure Review (PER) will review the historical expenditure patterns of the sector, especially those for the last five years. The PER will indicate policy achievements and failures, while providing insights for the on-going HAPP-5 preparatory process. The PER also links key policy issues for HAPP-5 with the funding pattern of investments in health and population sectors. It is well understood, though, that such causality is difficult, if not impossible, to demonstrate and that other factors may be at least as important as health sector interventions in achieving key goals. Nevertheless, given the absolute size of health sector expenditure in the economy, it is bound to have some effects. Indeed, the entire justification for public sector investments in health and population rest upon such and stronger premises. It is worth noting that the analysis is primarily confined within the publicly financed¹ health and population facilities, but points to issues relevant for health and population expenditures generally. This is not to minimise the size and scope of the private sector, which we expect, will be appropriately covered by the National Health Accounts project.

The PER examines the future resource availability through a resource envelope simulation involving three likely growth scenarios. The central assumptions behind the scenarios include overall economic growth (GDP growth rate), the GOB's expected commitment to higher funding of the sector, adjustments due to salary increases, and inflation and exchange rate assumptions. The resource envelope scenarios show how much resource will be available in the future to allow the GOB to expand its quality and coverage of services in the reproductive and child health care areas as promised.

The study also aims to look at equity concerns related to health care services. Equity, especially gender-based equity, remains a major issue for Bangladesh. Inequitable service distribution and access generate economic inefficiencies and sub-optimal resource utilisation. Targets associated with health and population status often become unattainable when inequity in service access exists.

Finally, it must be reiterated that the main focus of the PER is to identify the lessons learned from the historical trends of GOB expenditure in the health and population sector,

¹ Includes GOB funding made through the Ministry of Health and Family Welfare (MOHFW) and development partners contributions.

to determine whether expenditures are directed towards essential services and whether expenditures are likely to attain pro-poor and gender equity objectives during HAPP-5.

Health

1. Health Objectives of GOB

Ideally, GOB health expenditures should be understood in terms of sector objectives drawn from a formal health policy for Bangladesh, since an effective public expenditure review must highlight areas where outcomes have fulfilled objectives and where they have not. In the absence of a formal health policy for the country, it is difficult to evaluate the health objectives. Nevertheless, this paper attempts to evaluate the objectives set out in the government's Fourth Five Year Plan (1990/91-1995/96). For the remaining two years of the Fourth Five Year Plan (1996/97 and 1997/98), the performance is evaluated against the targets. The overall objectives of the Fourth Five Year Plan are human resource development, and the promotion, development and operation of a national health care system seeking to achieve the goal of "Health For All by 2000".

The major health objectives of the Fourth Five Year Plan are:

- *improvement of the health status of the population, especially of women and their children;*
- *strengthening and consolidation of PHC;*
- *improvement of nutritional status of the population;*
- *prevention of communicable diseases; and*
- *provision of health and family planning services in a package.*

Now is the appropriate time to see how far GOB has progressed in fulfilling these health objectives so that lessons learned from the FPHP can be of use in the final and subsequent implementation of HAPP-5. Since HAPP-5 implementation period overlaps with the Fifth Five Year Plan period, this PER will look at the Fifth Five Year Plan targets to recommend the areas where additional investments might be needed.

The major health objectives of the Fifth Five Year Plan are:

- *increase coverage of primary health care services for achieving “Health For All by 2000”;*
- *ensure universal access to basic health care and services of acceptable quality;*
- *develop human resources deployed for health and medical care;*
- *prevent major communicable diseases;*
- *improve health and well-being of women, especially poor, living in rural areas; and*
- *ensure reproductive health care for all women.*

The main focus of the ensuing HAPP-5 is on the provision of adequate reproductive health care. In designing the HAPP-5 and its main component ESP, policy makers have paid a greater attention to the reproductive health goals as recommended by the Cairo Conference (ICPD) in 1994. The second most important element of the ESP would be the child health care. Table 2 presents some of the important health status indicators with their 1990-95 targets, achievements made by the end of 1995, current status and the Fifth Five Year Plan targets.

Table 2: Health Sector Indicators

Indicators	Fourth Five Year Plan Targets (1990-95)	Achievements in 1995	Current Status (1995-97)	Fifth Five Year Plan Targets (1997-2002)
CDR (per 1000 pop.)	12.0	8.5	7.9	7
CBR (per 1000 pop.)	30.0	27.0	24.9	22
IMR (per 1000 live births)	80.0	78.0	77.0	55
MMR (per 1000 live births)	4.5	4.5	3.6	3.0
Life Expectancy (Years)	55	58	58.1 (Male) 57.6 (Female)	60 (Male) 59 (Female)
Population covered by PHC (%)	80	45	50	70
EPI Coverage (under 1 year in %)	85	66	66	85
Delivery assisted by trained personnel (% of preg. women)	50	12	14	80

Antenatal Care (% of preg. women)	60	35	40	80
Nutrition (per capita daily average intake in Kcal)	2100	1950	1950	2300
Control of Diarrhoea (% of ORS use)	90	66	70	90
Control of TB (% of cases found)	50	30	40	100

Sources: GOB, UNICEF.

As Table 2 shows, there has been quite remarkable progress toward some health targets of the Fourth Five Year Plan. Indeed, the government has been able to reach some targets by the end of 1995 and in certain cases further extended progress toward targets during the years 1995-97. It is evident from Table 2 that GOB attained targets for CBR, CDR, MMR, and life expectancy, but failed quite clearly to achieve targets relating to PHC coverage, immunisation, assisted delivery, antenatal care and nutritional status. There are certain areas like STD/RTIs and HIV/AIDS, where prevalence and incidence rates are not precisely known at this time and therefore target-related performance cannot be evaluated. Nevertheless, it is indeed fair to ask why there has been mixed performance in the attainment of health indicators. Conflicts in sector policy, insufficient investments or low service utilisation? In spite of its limited scope, this paper will attempt to suggest answers for such questions from the standpoint of public expenditure.

Perhaps, the targets were too ambitious or not well correlated with the historical pattern of GOB expenditure. Also, a closer look at the resource allocation in reproductive and child health care areas might provide insights to the problem, since some of the targets relating to reproductive (including maternal) health and child health care under the Fifth Five Year Plan seem especially high and ambitious. Nevertheless, it is arguable that these targets are achievable if the GOB were to spend its health budget in a way that effectively implements high priority health care programmes that straightforwardly reflect HPSS objectives. In the next section, we look at the GOB funding of the health sub-sector.

2. Review of GOB funding of the health sector

Like education and social welfare, the health and population sector is of preeminent importance for Bangladesh. Economic productivity is contingent upon the performance in the sector and represents an investment in the future social welfare of the country.

In Bangladesh, the health sector is funded by three major sources, i.e., the GOB, foreign development partners, and households. The latter source spends the highest proportion of the total health bill of the nation by a considerable margin. Ideally, all three sources would be examined, but, due to the limited scope of analysis, the PER focuses only on GOB and development partner expenditures.

If proceeding as expected, GOB health sub-sector funding during the past five years should win a strong GOB commitment to the sector. It should also be expected to show how the GOB anticipates approaching the HAPP-5, since a huge commitment from both the GOB and development partners is essential.

Table 3 and diagram 1 show the revenue and ADP allocation towards the health sector during the past five years (1993/94 – 1997/98).

Table 3: Revenue Budget and ADP allocations in Health, 1993/94–1997/98

US\$ million, 1997/98 constant prices

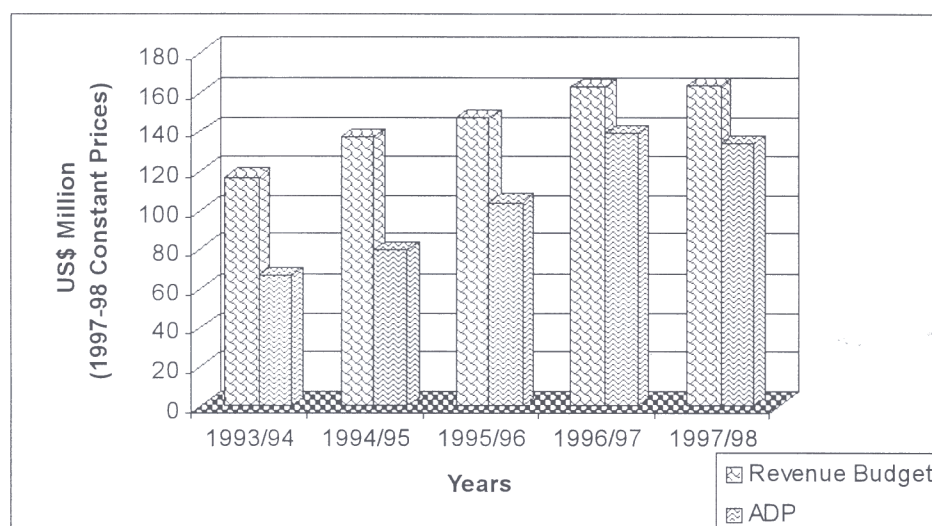
	1993/94	1994/95	1995/96	1996/97	1997/98
Revenue-Health	117.14	136.64	147.17	162.38	163.22
ADP-Health	66.47	79.81	103.78	138.82	134.12
Revenue-Health as % of Total Revenue Budget	3.20%	3.24%	2.91%	3.30%	2.96%
ADP-Health as % of Total ADP	3.52%	3.49%	3.64%	5.00%	4.59%

Sources: Revenue Budget documents, Ministry of Finance; Annual Development Programme documents, Ministry of Planning.

The figures of Table 3 make it evident that, over time, both revenue and ADP allocations in health have increased. In 1993/94, around 3.52 percent of the total ADP was targeted towards the health sub-sector, while in 1997/98, the proportion increased to 4.59 percent. However, in the Revenue Budget, the share of the health sector declined from 3.2 percent in 1993/94 to 2.96 percent in 1997/98. Therefore, it can be inferred that although the Revenue Budget allocation to health increased in absolute terms over the period, it did not

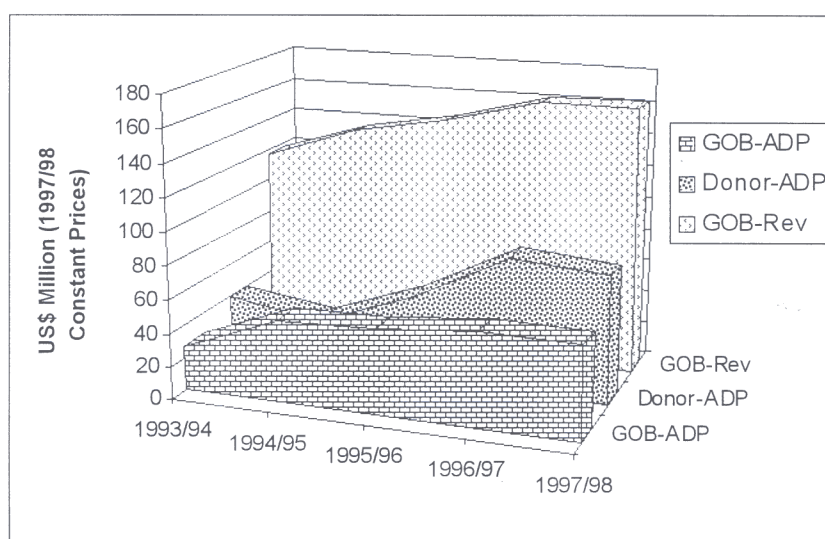
increase in relative terms. The ADP allocation, on the other hand, increased substantially, in both absolute and relative terms.

Diagram 1: Total Funding of the Health Sector in the Revenue Budget and ADP (US\$ million, 1997/98 constant prices)



Clearly, the budgetary allocations for the health sub-sector have expanded over the years. Although, such an expansion demonstrates GOB's firm commitment to the sector, there may be a limit to the future potential of such an expansion. Relatedly, in order to assess the future potential and sustainability, development partner contributions to the health need to be looked at closely to find out the source of such an expansion. If expansion is solely due to expansion in development partner contribution, then the expansion of GOB funding may require qualification.

Diagram 2 represents the health budget, i.e., GOB and development partner contributions to the ADP, and GOB Revenue Budget allocations.

Diagram 2: Funding of the Health Sector by GOB and Development Partners

Evidently, the expansion in budgetary allocation for the health sub-sector under ADP has been due to higher development partner contributions. Around 58 percent of the total ADP is funded by the development partners, while the rest is funded by the GOB. The development partner contribution has constantly increased between 1994/95 and 1996/97 with a slight decline in 1997/98. In the Revenue Budget, however, the GOB has successfully increased its revenue allocation to the health sub-sector in absolute terms. The increased GOB allocation in the Revenue Budget is likely to be due to increased revenue collection through introduction of VAT or due to redirection of funds from low priority sectors to the health sub-sector. It is noteworthy that the Revenue Budget for health has been growing by an average of 6.2 percent every year in constant 1996/97 prices.

If Revenue Budget allocations have grown significantly, where have these additional funds been lodged? What types of activities within the health sub-sector have benefitted most from this expansion and to what extent might such an expansion be sustainable in the future? Furthermore, has this expansion actually improved the indicators?

Table 4 shows the ADP allocation in PHC projects by year. It is noteworthy that the number of PHC projects under the ADP has increased from 30 in 1993/94 to 37 in 1997/98. During the same time, the number of ADP projects in the health sub-sector rose from 63 to 87 with a 73 percent increase in the ADP allocation for health. Nevertheless, the share of PHC funding of the total health ADP fell from 48 percent in 1993/94 to 43 percent in 1997/98.

Table 4: ADP Funding of the PHC Projects (US\$ Million, 1997/98 Constant Prices)

	1993/94	1994/95	1995/96	1996/97	1997/98
Total Health ADP	66.47	79.81	103.78	138.82	134.12
Growth of Health ADP	-	20.1%	30.0%	33.8%	-3.4%
Total PHC Funding	39.67	49.35	58.65	72.34	75.59
Growth of PHC Funding	-	20.77%	14.03%	21.14%	3.83%
GOB-PHC	14.28	27.98	24.57	22.94	22.73
Donor-PHC	25.39	21.37	34.07	49.39	52.85
GOB Funding as % of Total PHC Funding	36.0%	56.7%	41.9%	31.7%	30.1%
Donor Funding as % of Total PHC Funding	64.0%	43.3%	58.1%	68.3%	69.9%

Source: GOB and HEU Estimates.

Table 4 also indicates that GOB contributions to PHC funding under the ADP has fallen from 36 percent in 1993/94 to 30.1 percent in 1997/98. This is perhaps due to increased funding of non-PHC activity like new hospital and other tertiary-level facility construction, renovation and extension of central administrative facilities and project offices. However, in 1994/95, the GOB contributions to PHC rose to around 57 percent. On the other hand, the development partner contributions have increased from 64 percent in 1993/94 to around 70 percent in 1997/98. Interestingly, in those years when the GOB contributed more, development partners contributed less. The exact reason behind this trend is yet to be ascertained. Evidently, GOB contributions to PHC funding in absolute terms began to decline after 1994/95 with increased development partner contributions. Lastly, comparing the growth of health ADP with that of PHC funding, one finds out that

the growth rate of PHC funding has been lagging behind the growth rate of health ADP during 1995/96-1996/97, which reiterates the point made earlier that more emphasis were given to non-PHC activities during that period.

Financial sustainability of the rises in ADP funding for the health sub-sector is difficult to certify. In fact, it is quite difficult to support the view that such an expansion in ADP funding could be sustained in the future. This is evident from Table 4, which clearly suggests that ADP allocations are becoming increasingly dependent on development partners. Even when sustainability is defined of donor dependency, as in this case, the issue of sustainability is worth further investigation. In a later section, the PER attempts to provide some insight concerning this issue with reference to the resource envelope for HAPP-5.

Still, there is another important dimension to the issue of sustainability as shown in recent expansions of sector funding. Some of the GOB funding to the health sub-sector relies upon *commodity*, *project* and *food* aid. Project aid comes under the ADP funding by the development partners. Food and commodity aid increases the GOB resource base. Because an expansion in the sector's resource base can directly or indirectly affect sector allocation, it is fair enough to ask whether expansion of sector funding might have resulted from higher food and commodity aid over the past five years.

Table 5 shows aid flows into Bangladesh, disaggregated by commodity, food and project aid. The grant and loan components of this aid represent an area of potential sector funding, since aid in the form of grants does not incur repayment obligation, and is generally treated as a part of the GOB resources. Loans, on the other hand, accumulate to total debt and require repayment in either the short or the medium term.

Table 5: Foreign Assistance to Bangladesh, by type, 1993/94-1996/97 (US\$ million)

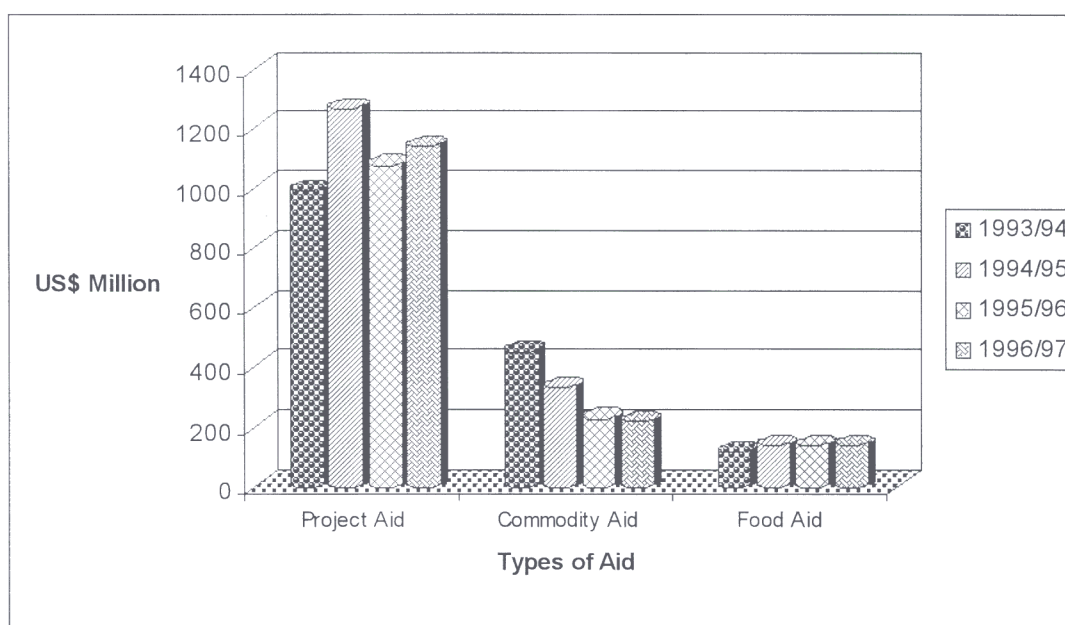
	1993/94	1994/95	1995/96	1996/97
Project Aid				
<i>Grants</i>	407.7	525.8	357	348.7
<i>Loans</i>	581.8	743.1	719.4	794.7

Commodity Aid				
<i>Grants</i>	184.5	226.9	182.5	170.6
<i>Loans</i>	266.8	105.8	46.9	48.1
Food Aid				
<i>Grants</i>	117.9	137.4	138	141.1
<i>Loans</i>	0	0	0	0

Source: ERD Publications, Ministry of Finance

Table 5 suggests that more than 60 percent of project aid is in the form of loans. Further, the amount of project aid as loans is increasing at a faster rate during the past five years (1993/94-1997/98) than in the previous five years. Interestingly, the grant component of project aid is shrinking, keeping the total amount of project aid more or less unchanged (See Diagram 3). On the other hand, commodity aid exhibits the opposite trend with aid increasingly coming as grants and the total amount of commodity aid decreasing over time (See Diagram 3). All indications are that these trends will continue in the future barring a major natural disaster. Food aid has no loan feature in it and it has been increasing steadily (See Diagram 3). However, there are indications that, if the agricultural sector performs well, there will be a decline in food aid to Bangladesh in the future.

Diagram 3: Foreign Assistance to Bangladesh by types of aid, 1993/94-1996/97 (US\$m)



Hence, this brief investigation of types of aid received by Bangladesh during the last five years indicates clearly that the nation's debt burden is increasing mainly from aid in the form of loans. Further analysis of this issue is required to identify the exact impact of such a burden and to assess the viability of debt repayments by the GOB in the future. Even with a very nominal interest rate for debt servicing and a long grace period, Bangladesh will face a tremendous challenge from debt repayment in the next century unless the country's macroeconomic performance, especially GDP growth rate and export growth rate, improve substantially. The irony, of course, is that any reduction in commodity aid and food aid under the present economic situation is likely to make further growth in the GOB's funding of the sector more difficult. Such reduction would erode a part of the GOB's valuable resource base that in turn might make investment prospects in the health and population sector more difficult. Therefore, the government should make concerted efforts to expand the domestic funding capacity of the sector and follow an effective debt management strategy in order to avoid fund constraints that might hinder the health and population sector performance in the future.

2. Recurrent and Capital Expenditures in the ADP

According to the 1997/98 ADP, there are 87 health projects funded by the GOB and its development partners, including both PPs and TAPPs. Until recently, there was no database that monitored the allocation and expenditure of the ADP projects in a consistent and disaggregated manner. The Reforms in Budgeting and Expenditure Control Phase 2B (RIBEC 2B) project has initiated a process of streamlining the expenditure data for the ADP projects by developing, among other mechanisms, an expenditure format with new RIBEC classifications for easier accounting and monitoring of projects. It is envisaged that 1998/99 Revenue Budget will be presented using the new classifications. Since, RIBEC 2B has not taken steps to adjust data from previous years according to the new classifications, it remains difficult to compare financial databases between previous years and the current year.

The ADP document published by the GOB Planning Commission, nevertheless, provides a disaggregated picture of ADP allocation by expenditure heads for use in the PER. According to the ADP classification, the followings are termed as revenue expenditure items:

- Salaries of expatriate staff
- Salaries of local staff
- Rent
- Utilities
- Operation and Maintenance
- Other bills

Included under capital are other items, such as construction, vehicles, equipment and training.

Table 6 summarises the share of GOB and development partner contributions to health projects in the ADP by expenditure heads and indicates that the funding of capital items in the ADP is far greater than for revenue items. Although revenue items accounted for about 18 percent of total funding in 1993/94, the proportion receded to 8.3 percent in 1997/98. This indicates clearly that development partners are increasingly unlikely to share the GOB liabilities in the health ADP. This impression is reinforced by the expansion and recent growth in the Revenue Budget. Table 6 also shows that the GOB funding of the ADP is higher than the revenue cost items incurred in the ADP expenditures. This fact indicates that almost all of the revenue expenditures in the health sub-sector are financed by the GOB from its own resources.

Table 6: Summary Division of Health Projects in the ADP, 1993/94-1997/98

Financial Year	GOB	Donor	Capital*	Revenue*
1993/94	41%	59%	81.6%	18.4%
1994/95	61%	39%	84.7%	15.3%
1995/96	49%	51%	87.9%	12.1%
1996/97	41%	59%	91.5%	8.5%
1997/98	42%	58%	91.7%	8.3%

Source: GOB

* Obtained from the Annual Development Programme documents for 1994/95-1997/98. Figures for 1993/94 were estimated using HEU and ADP databases.

3. Health Activities in the Revenue Budget

It is already evident from Table 3 and Diagrams 1 and 2 that GOB funding from the Revenue Budget for the health sub-sector has been increasing steadily from 1993/94 to 1997/98, with the Revenue Budget for health growing by almost 27 percent over the interval. The importance of this increase is amplified when it is understood where these additional funds were invested. This involves several steps. First, to analyse the spending pattern of the Revenue Budget, it is necessary to disaggregate the Revenue Budget for the health sub-sector by levels of service, i.e., *primary*, *secondary* and *tertiary*. *Primary* includes the basic package of curative services and preventive programmes provided in the THCs and below. *Secondary* consists of general curative care provided in the District Hospitals, and *tertiary* refers to the more specialised care delivered by Medical College and Specialised Hospitals. *Other* care includes the administrative and planning operations of the Ministry of Health and Family Welfare headquarters.

Diagram 4: Allocations to the Health Sector from the Revenue Budget, 1993/94-1997/98

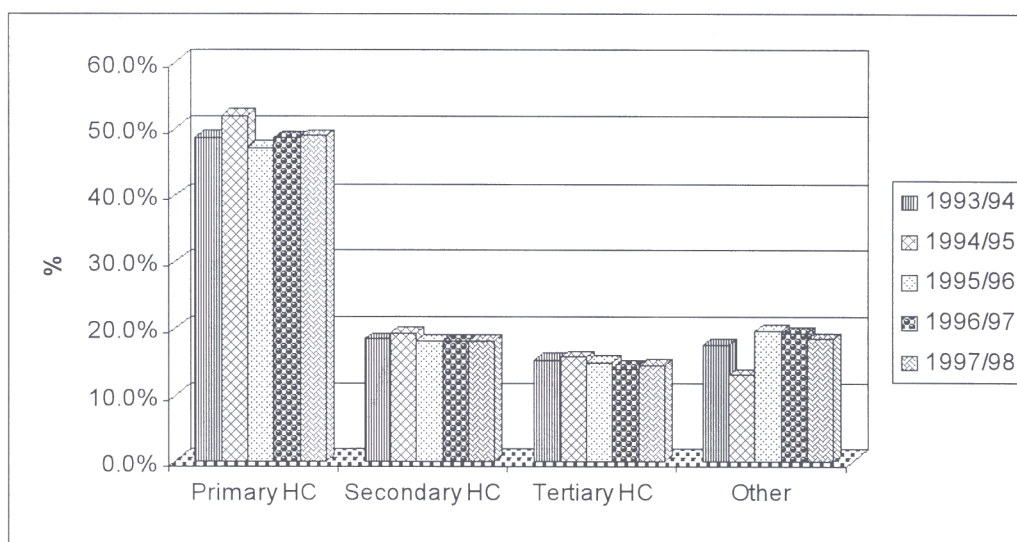


Diagram 4 represents the composition of the health sub-sector Revenue Budget, between 1993/94 and 1997/98, highlighting the revised allocations for each level of care. It is noteworthy that the allocation for 1997/98 is proposed and yet to be revised. Evidently, the major beneficiary of the Revenue Budget for health is the primary health care (PHC),

although the share of the PHC has remained more or less unchanged during the past five years with a slight drop in 1994/95, when the share of *other* health care increased by around 5 percent. Another interesting fact is that the share of secondary health care remained unchanged between 1995/96 and 1997/98, and was similar to *other* category, which includes largely the central administrative and planning expenditures. Finally, given the massive investment that there has been into PHC activities from ADP, it may be wondered if there will have to be similar substantial growth in the funding of PHC activities in the Revenue Budget.

4. Summary and Recommendations

- From the preceding review of the GOB funding of the health sub-sector, it is quite apparent that there has been an expansion in allocation in both the ADP and Revenue Budget. Although, it is hard to clarify if the expansion has resulted from inter-sector allocation or other sources, it is evident that the GOB has been successful in redirecting a major part of the health allocation to PHC activities.
- Nevertheless, the health targets, as described in the GOB Fourth Five Year Plan document, have little to say about the achievements of this large investments. Some of the targets relating to reproductive health care have not been achieved fully. This could be because either the targets were too ambitious or there has been less than optimal allocation. As for example, the maternal care and reproductive care indicators did not respond well to the increased funding of PHC activities.
- GOB should maintain the tradition of financing the recurrent costs associated with the health-related interventions from within its Revenue Budget, especially when there are strong indications that in the future the development partners will not be keen to finance the GOB recurrent costs. It is worth noting that GOB has committed to finance all recurrent expenditures relating to pay and allowance from its own resource base during HAPP-5.
- Since a majority of the project aid and commodity aid comes under loans, GOB should carefully think about the effective absorption, utilisation and repayment of foreign aid. Loans generate inter-temporal debt burden that can create high cost to the economy in the future, and can hinder the future growth of the economy. However, this does not imply that foreign aid as grants is preferred because many people argue that grants

may actually reduce financial sustainability, since they are gifts and there is no guarantee that they will continue in the future.

- GOB should seriously attempt to utilise the RIBEC expenditure formats to develop an efficient monitoring device to track the expenditure under both the ADP and Revenue Budget. In this connection, GOB should also make use of the ensuing National Health Accounts (NHA) database. Like in many other countries, Bangladesh should have a health and population sector database that would ideally include macro, meso and micro level databases. Such an integrated information-based budgeting tool would then allow policymakers, researchers and academicians to carry out necessary policy-oriented research activities.
- GOB should develop a coherent appraisal mechanism to analyse the impacts of expenditure in the health sector. One such mechanism would be an annual assessment of sustainability and policy review (ASAPR). This mechanism, if adopted, could help policymakers annually evaluate the objectives of the forthcoming HAPP-5, analyse GOB expenditure patterns, review the sustainability concept from a broader point of view, and analyse the overall health and population programme from equity and pro-gender perspectives. ASAPR can also help policymakers revise and/or amend policies pertaining to HAPP-5 objectives.

C. The Population Sector

1. *Objectives of GOB in the Population Sector*

Population has long been a major deterrent factor in Bangladesh's economic growth. Although, Bangladesh has successfully managed to contain its increasing population growth rate during the past two decades, it still remains as one of the major barriers to overall economic growth. TFR has declined from over 6.7 in 1973 to a current modest level of 3.3 in 1997, the country has yet to achieve the NRR equal to one. Bangladesh expect to achieve a replacement level population growth rate by the end of HAPP-5.

Against the backdrop of the 1994 International Conference on Population and Development (ICPD) held in Cairo, which renewed the efforts to decelerate population growth rate in many developing nations, has prompted GOB to adopt a national population policy in line with "Reproductive Health For All". The objectives of the Cairo conferences have been aptly reflected in the government's commitment to achieving its reproductive goals through the Health and Population Sector Strategy and subsequently through HAPP-5 implementation plan. One of the major objectives of HAPP-5 is to ensure reproductive health to the vulnerable section of the population.

Although in many developing countries, population serves as a means to fostering economic growth, Bangladesh has experienced the opposite. Excessive population, which doubled only in 30 years time, has resulted in lower productivity, unemployment, malnutrition, and rural-urban migration. Consequently, the towns and cities are crowded-in by rural migrants, who settle down in urban slums and exacerbate the situation.

All Five-Year plans have emphasised the need for control of the population growth rate. Special measures were taken in all plans to accelerate efforts in bringing down the growth rate to a moderate level. Development partners have also been engaged in this pursuit from the very onset. In spite of successes made in the field of population control, the target to achieve an NRR equal to one by the year 2000 is very bleak and the country would be lucky if it were reached by the end of HAPP-5.

Like the health policy, the country at present does not have any national population policy in place. Hence, it is difficult to evaluate GOB objectives for the population sub-sector. The targets set forth at different times are incongruous with objectives and appear to be overly ambitious. In this PER, we are going to evaluate the objectives set out in the Fourth Five Year Plan.

The major population objectives of the Fourth Five Year Plan are:

- *give priority to planning and implementation of effective population control and family planning both at the national and local level*
- *integrate population issues within the broad framework of development right down to the community level*
- *reduce rapid growth of population in shortest possible time*
- *improve maternal and child health status*
- *initiate multi-sector population programme to generate public awareness of RTI/STIs and HIV/AIDS*

HAPP-5 emphasises the need for an effective reproductive health programme to reduce and avoid unwanted pregnancies and postponed births, and aim at services for safe pregnancy and delivery. Included as well are, fertility regulation and treatment of abortions, management of reproductive morbidity and mortality, including STD/HIV, and selected other aspects of maternal and adolescent health.

Sub-areas of reproductive health care consist of the following:

- Safe motherhood;
- Family Planning;
- Prevention and Control of STI/RTI/AIDS;
- Maternal nutrition;
- Adolescent care;
- Infertility; and
- Neo-natal care.

Since the Fifth Five Year Plan envisages population control objectives similar to those for HAPP-5 and HPSS, this PER does not reproduce their descriptions. Finally, since many population objectives mirror those for health, the PER proceeds analysing achievements towards the control of population growth.

Table 7: Selected Indicators of the Population Sector

Indicators	1991/92	1993/94	1994/95 Target	1994/95 Attainment	1997/98	HAPP-5 / FFYP* Target
Population Growth Rate (%)	2.07	2.0	1.82	1.96	1.84 ^a	1.4
TFR (per woman)	4.0	3.8	3.4	3.78 ^b	3.3	2.6
CPR (%)	41	43	50	46	49	62

Sources: GOB, DHS, BBS and USAID

^a Bangladesh Bureau of Statistics

^b Bangladesh Demographic and Health Survey, Mitra and Associates, 1997

* FFYP: Fifth Five Year Plan

Table 7 document the population sub-sector's considerable success. Population growth rate has declined to around 1.84 percent in 1997/98 from 2.07 percent in 1991/92 and TFR has also declined markedly from 4.0 per woman in 1991/92 to 3.3 per woman in 1997/98. Also, Contraceptive Prevalence Rate has increased from 41 percent in 1991/92 to around 50 percent in 1997/98.

Despite these successes, a comparison of targets and corresponding achievements indicates that the achievements were in fact belated achievements trailing far behind target timelines. In most cases, the targets set for 1994/95 have not yet been met. In light of this pattern, the targets for HAPP-5/FFYP raise doubts that as to what extent they may be achieved during the next five years.

The current momentum toward a reduced population growth rate must be maintained in order to achieve a replacement level population growth rate. It should be borne in our mind that, perhaps this is the last time for Bangladesh to achieve its reproductive goals. If the country fails to achieve them, the success story of the population frontier will almost certainly wither away. To better assess the possibility of such

achievements in the future, the PER examines historical GOB expenditure patterns for population sub-sector and it is to this matter that the study now turns.

2. Review of GOB funding for population

Over the last decade, the population sub-sector has received much support from both the GOB and its development partners aiming to reduce population size and ensure effective reproductive health for the population.

Table 8: Funding of Population Activities in the ADP and Revenue Budget
(US\$ million, 1997/98 constant prices)

	1993/94	1994/95	1995/96	1996/97	1997/98
Revenue Budget	8.86	9.82	11.08	11.73	11.26
ADP	89.15	111.13	115.82	111.99	124.15

Sources: Revenue Budget documents, Annual Development Programme documents, IMF

The figures in Table 8 reveal that population funding in the ADP has increased at an average rate of 11 percent per annum, whereas comparable figures for the Revenue budget have been increasing at a slower average rate of 6 percent per annum. This suggests that more of the funding for population activities come from the ADP than from the Revenue Budget. To grasp the global impact of this funding pattern for population, the trends shown in Diagram 5 need to be understood.

Diagram 5 highlights the fact that total ADP funding for population sub-sector has been increasing steadily over the last five years period, except for 1996/97 when it dropped. It also indicates the fact that ADP funding for population is heavily dependent upon development partner contributions. On the other hand, the GOB contributions to the ADP has been increasing over the years while GOB contributions to the Revenue Budget have remained more or less unchanged. Taking a global view of funding of population activities, it is fair to assert that population has remained a donor-funded sub-sector where development partners play an essential role in sustaining population achievements. If this assertion is true, then how can GOB sustain the momentum required to achieve an NRR equal to one by the early next

century? In order to deal with this issue, a closer look at the disaggregated data would be required.

Diagram 5: Sources of funding in the population sector, 1993/94-1997/98 (US\$m, 1997/98 constant prices)

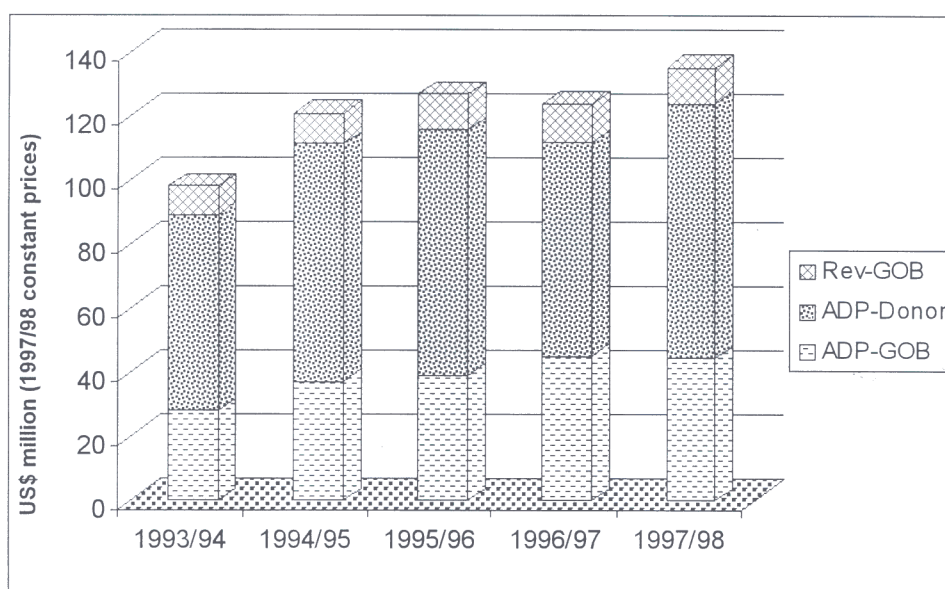
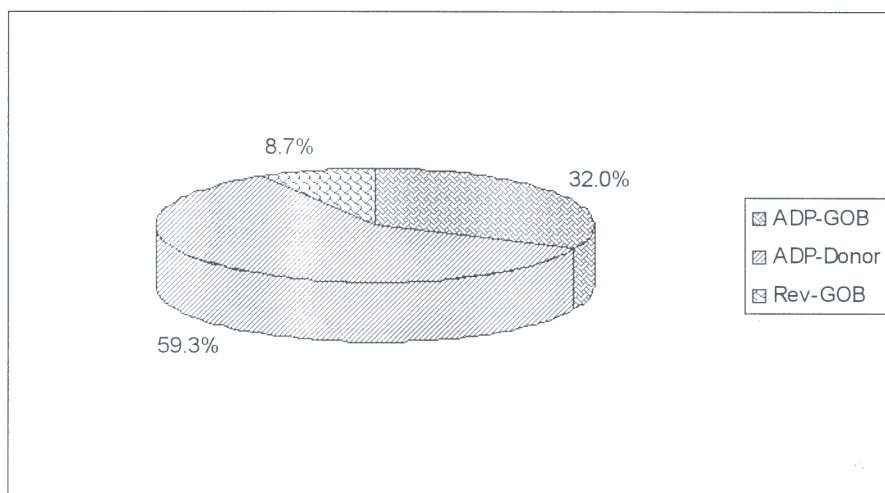
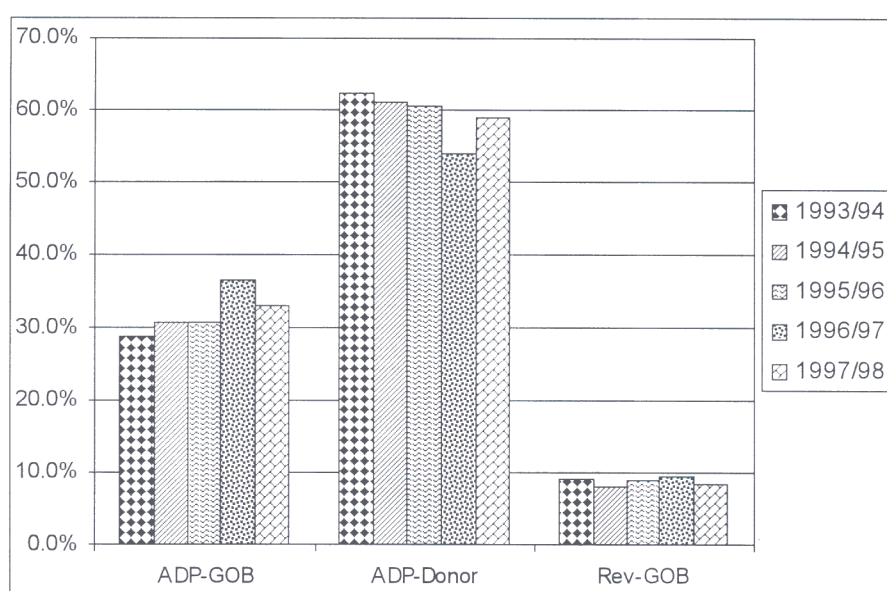


Diagram 6 shows the disaggregated funding pattern by sources, i.e., development partners and GOB. Around 59 percent of total allocation for population sub-sector comes from the development partners. The remainder (41 percent) comes from the GOB, of which about 9 percent is drawn from the Revenue Budget. The current contribution of GOB to population activities, which stands at 41 percent, has increased by 2 percentage points from the last PER conducted by the Health Economics Unit in 1995/96. At that time, the GOB share accounted for around 39 percent of total population allocations. What is important to see is that this increased share comes from the expanded GOB contribution to the ADP, since the GOB raised its share of the total ADP to around 41 percent by 1996/97. This increase reflects the GOB's commitment to population activities and is consistent with overall HPSS and HAPP-5 objectives.

Diagram 6: Composition of Population Sector Funding, 1993/94-1997/98

Another interesting trend can be seen in Diagram 7, below. Over the years of the PER, the moving average of funding for population sub-sector reveals that development partner contributions are decreasing while domestic funding through ADP and Revenue Budget allocations is increasing gradually. In one respect, this is particularly good news for those who endorse an increasingly greater GOB investment for population activities, but in other, it is not so encouraging since the share of GOB in ADP funding is relatively quite small.

Diagram 7: Moving Average Trend of Population Sector Funding (1993/94-1997/98)



3. Funding of Population Activities in the ADP

The number of ADP projects in the population sub-sector increased from 39 in 1993/94 to 47 in 1994/95, but then declined in 1996/97 to around 40. While the absolute number of projects tells little about the volume of funding, it is worth noting since it indicates the scope of activities.

Table 9: Share of ADP Allocation to Population Projects as percentage of Total ADP Allocation, 1993/94-1997/98 (at 1997/98 constant prices)

	1993/94	1994/95	1995/96	1996/97	1997/98
Total ADP	2023.13	2350.89	2694.81	2653.38	2921.04
ADP- Population	89.15	111.13	115.82	111.99	124.15
% of Total ADP	4.4%	4.7%	4.3%	4.2%	4.4%

Sources: Revenue Budget, Ministry of Finance; Annual Development Programme, Planning Commission.

Table 9 shows that the relative share of the ADP allocation going to population activities has been around 4.4 percent over the PER period. This means that even though the number of ADP projects in the population sub-sector decreased over time, the relative share of ADP funding of population did not decline.

To further understand ADP expenditure patterns Table 10 presents a summary of funding and activities for population projects in the ADP.

Table 10: Summary of Funding and Activities of Population Projects in the ADP (in percentages)

	GOB	Donor	Capital*	Revenue*
1993/94	31.7	68.3	58.6	41.4
1994/95	33.4	66.5	60.0	40.0
1995/96	33.7	66.3	54.8	45.2
1996/97	40.5	59.5	43.7	56.3
1997/98 (p)	35.8	64.2	57.3	42.7

Source: Revenue Budget, Ministry of Finance; Annual Development Programme, Planning Commission.

* Obtained from the Annual Development Programme documents for 1994/95-1997/98. Figures for 1993/94 were estimated using HEU and ADP databases.

Table 10 clearly reiterates a point made earlier that ADP funding for population activities is heavily donor dependent. Further, it indicates that recurrent expenditures in the population sub-sector are still largely donor funded. Finally, in comparison to the share of recurrent expenditures in health ADP (around 8% in 1997/98), the share of that in population ADP is much higher (around 43% in 1997/98).

3. PHC Activity within the ADP

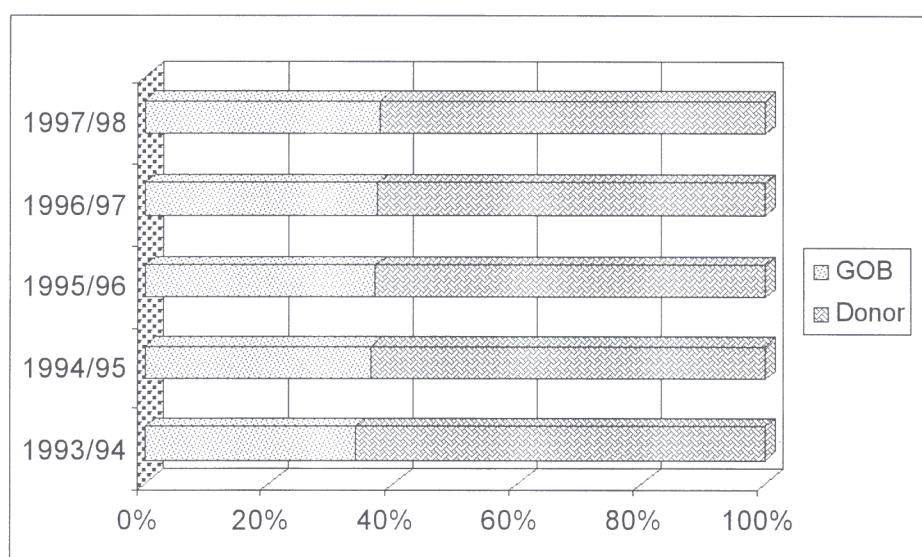
Against the backdrop of GOB HAPP-5 commitments, it is necessary to look at the ADP funding of PHC activity. Table 11 presents the ADP funding pattern for PHC. With an exception in 1996/97, the PHC share of the total ADP has constantly been over 85 percent. Around 93 percent of the GOB's contribution to the ADP goes for PHC activity, and the rate of growth in these GOB contributions has been increasing over time. On the other hand, a little over 80 percent of total development partner contributions to the ADP go for PHC activities and have remained relatively constant over the PER period.

Table 11: ADP Funding of PHC Activity, 1993/94-1997/98

	1993/94	1994/95	1995/96	1996/97	1997/98
PHC funding as % of Total ADP funding	86.5%	87.2%	86.8%	68.2%	91.9%
GOB-PHC funding as % of GOB-ADP funding	92.0%	94.3%	92.8%	92.8%	93.3%
Donor-PHC funding as % of Donor-ADP funding	84.0%	83.7%	82.5%	82.0%	82.9%

Source: HEU Estimates.

Diagram 8 shows the funding of PHC activity by GOB and development partners. It is evident that around 65 percent of PHC funding comes from the development partner contributions. In addition, Diagram 8 indicates that during the last five years, the GOB's ADP contributions toward PHC have increased marginally (from 34 percent in 1993/94 to 38 percent in 1997/98). Yet, considering the fact that during HAPP-5, GOB will have to increase its share of PHC funding, this is not satisfactory.

Diagram 8: Share of GOB and Development Partners in PHC Funding

4. Funding of Population Activity in the Revenue Budget

Although, it is apparent from the preceding section that the GOB has put additional emphasis on population activity, it has not committed an identical proportion of its revenue budget to population. Diagram 9 presents the funding of health and population activities in the Revenue Budget.

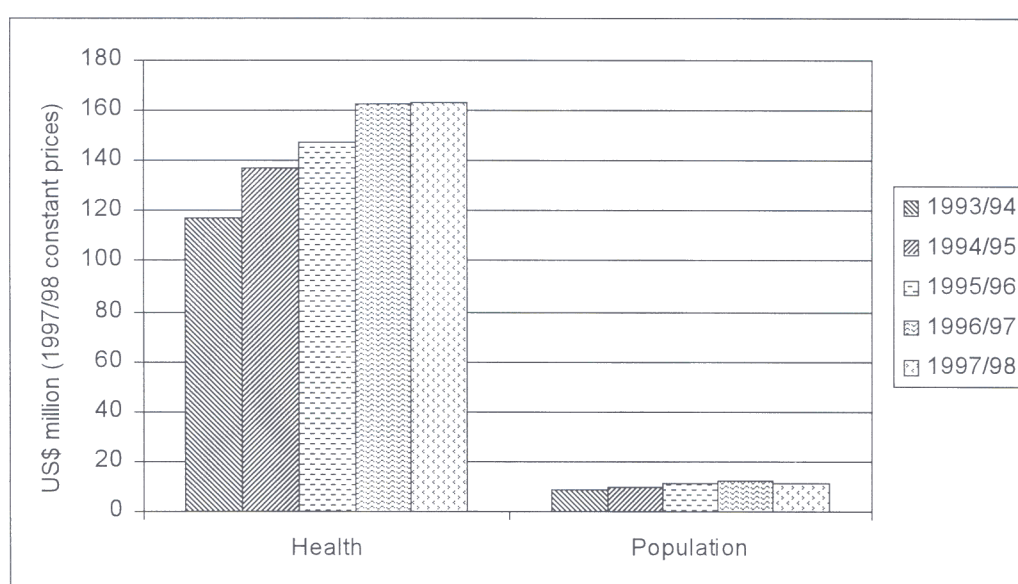
Diagram 9: Funding of Health and Population Activities in the Revenue Budget.

Diagram 9 identifies the fact that GOB has been allocating a major share of its health and population Revenue Budget toward health sub-sector. The absolute amount of Revenue Budget allocation to the health as opposed to population has been enormous. Further, the Revenue Budget allocations to health grew steadily over time while it remained more or less unchanged for population. With the advent of HAPP-5, GOB should rethink its strategy and allocate more funds for population activities.

5. *Summary and Recommendations*

- The funding of population sub-sector has contributed to the remarkable progress of Bangladesh towards reducing the size of its population. The country's demographic indicators suggest promising results, supporting the conclusion that the country may be able to achieve a replacement level population growth rate within next ten years.
- The growth of ADP allocations for population sub-sector has been most impressive and the GOB's contributions to the ADP has increased substantially over the years.
- GOB has begun to reduce donor dependency by allocating more money into the ADP.
- Recurrent activities and associated costs for population sub-sector are still donor funded.
- More than 85 percent of ADP allocation for population is channelled toward PHC activities.
- Nevertheless, compared to ADP growth rate for the health, population expenditures are lagging behind by a huge margin.
- GOB should develop a coherent appraisal mechanism to analyse the impacts of expenditure in the health sector. One such mechanism would be an annual assessment of sustainability and policy review (ASAPR). This mechanism, if adopted, could help policymakers annually evaluate the objectives of the forthcoming HAPP-5, analyse GOB expenditure patterns, review the sustainability concept from a broader point of view, and analyse the overall health and population programme from equity and pro-gender perspectives. ASAPR can also help policymakers revise and/or amend policies pertaining to HAPP-5 objectives.

D. Equity of Public Health Expenditure in Bangladesh

Poverty reduction efforts in Bangladesh emphasise three major approaches – promoting income growth of the poor; raising the survival capacity of the poor via education, health, nutrition and other human development interventions; and providing social security and safety nets for the poorest and the most vulnerable. HAPP-5 attempts to reduce poverty through efficient and equitable provision of quality health care services. It also aims to provide essential health and family welfare services that can be easily accessed by the poor, especially women and their children.

Public health expenditure can influence poverty by reducing the incidence of ill health and malnutrition, thereby contributing to all three of the approaches listed above. It also enables the poor to ameliorate their health condition and other capabilities to earn higher incomes and enhance living standards. Since, in absolute terms, the public expenditure on health and family welfare has been increasing (from Tk. 6.67 per capita in 1983/84 to Tk. 12.50 per capita in 1993/94; Source: Bangladesh Bureau of Statistics, 1995), its contribution to poverty reduction should be positive.

Public spending in per capita terms on health and family welfare has increased over time, reflecting the enhanced capacities and changed priorities for the government. Nevertheless, it remains unclear to what extent these new expenditure levels have reached the poor. The serious nature of this concern is underlined by the fact that the average expenditure on health and family welfare does not reflect rural trends, nor suggest the extent of access of the rural poor to available services.

A “benefit incidence” based on health expenditures in 1994 within a partial equilibrium framework was conducted by the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP). The results of that analysis suggest how the “gross” benefits of government health spending are distributed across various income groups and compares the concentration of rural income distribution of benefits from health expenditure by income strata to identify the distributive impact of health expenditure.

Table 11 shows the result of this analysis. It suggests that the bottom 20 percent of rural households enjoy nearly 22 percent of the public spending on health and family welfare, while the top 20 percent get 21 percent. The poor households (who constituted 52 percent of total population in 1994) claimed around 57 percent of public health expenditure while the share for non-poor households is 43 percent. Thus, the pattern of public health expenditure appears not to be extremely skewed. The pattern that emerges for Bangladesh seems to be generally pro-poor. However, it is worth noting that this study involved both health and population services in its analysis, which in a way raises doubt as to whether the suggested pro-poor pattern remains valid, because it is generally regarded that population services are usually sought by the poor households. The study raises questions as to whether the top 20 percent should get any benefits of the public health resources and whether it is appropriate to use linear assumptions to analyse “benefit incidence” when “health needs” are not linear, even in the most narrow epidemiological terms. In addition, Table 12 suggests that the top 10 percent and bottom 10 percent of rural households enjoy nearly the same health benefits, but does not tell anything about the contents of the benefit package. Further, the analysis is confined only within rural households and excluded the vulnerable poor in urban areas. It is certainly worth investigating the health benefit patterns for urban population using the income and public expenditure-based “benefit incidence” framework. Finally, the study failed to identify the sources of health benefits, i.e., tertiary, secondary and primary health care facilities.

Table 12: Distribution of Benefits from Public Health Expenditure in 1994

Per capita income decile	Percent of rural income	Percent of benefits from public spending on health and family welfare
<i>1</i>	<i>1.94</i>	<i>12.88</i>
<i>2</i>	<i>3.25</i>	<i>8.86</i>
<i>3</i>	<i>4.11</i>	<i>12.22</i>
<i>4</i>	<i>5.64</i>	<i>3.67</i>
<i>5</i>	<i>6.05</i>	<i>17.84</i>
<i>6</i>	<i>6.91</i>	<i>8.13</i>

7	9.50	8.62
8	12.63	6.87
9	17.38	7.27
10	32.59	13.64
Total	100.00	100.00

Source: CIRDAP, December 1997.

The above findings should not, however, detract from observing a disturbing aspect of public health intervention in rural areas. The share of public health access in Bangladesh is still limited to only 12-13 percent of the rural population, with little variation across socioeconomic groups (Source: BBS, 1995). The proportion has remained remarkably stable over the years, at least during the period since 1980s so that access to key benefits such as maternal health care remains dismally low (less than 1 percent according to BBS 1995).

Using the same benefit incidence technique, another study² observed that the richest 20 percent of the total population utilises the District Hospital facilities more than their counterparts, the poor. Service utilisation at Thana Health Complexes and Union level facilities, however, showed the opposite trend.

Table 13: Use of Public Health Care Facilities by Level and Income Quintile

	% Hospital Visits	% THC Visits	% Union Facility and/or Below
Visits			
<i>Poorest Quintile</i>	13	23	26
<i>Second Quintile</i>	17	20	19
<i>Third Quintile</i>	25	23	21

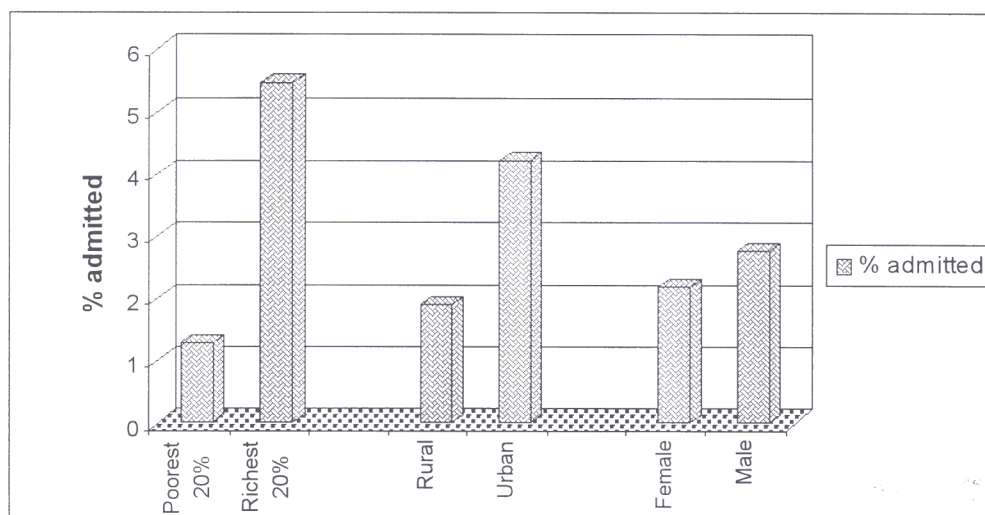
² A study was conducted in November 1997 by the Project Preparation Cell (PPC) of the Ministry of Health and Family Welfare, Bangladesh to look at the equity impacts of the forthcoming Fifth Health and Population Programme (HAPP-5). The findings of the study were used in preparing the Programme Implementation Plan (PIP) document of MOHFW. The study collected micro data from District Hospitals (DH), Thana Health Complexes (THC) and Union Health and Family Welfare Centres (UH&FWC).

<i>Fourth Quintile</i>	<i>23</i>	<i>20</i>	<i>17</i>
<i>Richest Quintile</i>	<i>22</i>	<i>14</i>	<i>17</i>
Residence			
<i>Rural (82%)</i>	<i>65</i>	<i>89</i>	<i>83</i>
<i>Urban (18%)</i>	<i>35</i>	<i>11</i>	<i>17</i>
Gender			
<i>Male (51.3%)</i>	<i>48</i>	<i>53</i>	<i>55</i>
<i>Female (48.7%)</i>	<i>52</i>	<i>47</i>	<i>45</i>

Source: Programme Implementation Plan document, PPC, MOHFW, 1997.

It is evident from Table 13 that an overwhelming proportion of the rural poor visit health and family welfare facilities. There could be two implications of this finding: either rural people are more prone to illnesses than their urban counterparts or there is not enough private health care facilities in rural areas, which force them to go to public facilities. In terms of gender disaggregation, males visit THC and Union and/or below facilities more than do females. By income groups, it is clear that the poor are marginalised in terms of access to hospitals and use of facilities. Hence, there exists an inequity in terms of utilisation of hospitals that are supposed to be the high cost centres. In Bangladesh, where majority of the population faces abject poverty, this inequitable access to and use of public facilities by the poor generates distributional inefficiency of public resources and aggravates the health status of the population. What prevents the poor from gaining access to facilities need to be identified first and then GOB will have to undertake correct policy measures to remove this barrier since the main objective of HAPP-5 is to make health and family welfare services more equitable and gender sensitive.

Diagram 10 shows in-patient use of public health facilities by income groups, rural-urban residence, and gender. Patients from the richest quintile appear to be more than five times as likely to be admitted for expensive in-patient care as patients from the poorest quintile. Similarly, patients from urban areas are more than twice as likely to be admitted as are rural patients. Further, male patients are more likely to be admitted as in-patients than females are.

Diagram 10: In-patient Use by Income Groups, Residence and Gender

Source: PPC, MOHFW.

The findings of this study therefore suggests that income-based inequity exists in terms of access to and use of public health facilities in Bangladesh and there is geographical inequity in terms of “visits” and “in-patient admissions”.

An equitable and pro-gender set of aims is contained in the objectives of HPSS and HAPP-5. In the area of hospital care and access, an equitable distribution of health expenditure taking the poor and the most vulnerable into account will require aggressive pursuit by GOB policymakers and development partners alike.

Summary and Recommendations

- The issue of equity in terms of income and gender is complex, and a general overview of patterns of public expenditure may not be able to capture some of the more important underlining factors that affect access and utilisation of services, such as geographic location of residence, gender, knowledge of service availability, knowledge of how to access services officially and unofficially, etc. These factors, and their interactions, once identified and analysed, may provide useful guides in examining and directing the flow of public expenditure to in order

to better tackle the issue of equity and the protection of the poor and the most vulnerable.

- Further equity analyses should be conducted taking into account the effects of regional variations. In this regard, this PER suggests that GOB resource allocation should be based on region specific health care needs and health care expenditure. Health care needs are non-linear and subject to seasonal and demographic variations. Therefore, an ideal mechanism to allocate GOB resources reflecting regional characteristics would be to develop a composite index as a bellwether. This composite index, among others, might include regional variations in income, health care seeking behaviour, demographic composition, and access to public health facilities.

E. Future Funding of the Health and Population Sectors

In light of HAPP-5, projection of the future resource envelope for the health and population sector becomes especially important. Such forecasts set out the likely resource ceiling for GOB operations. By projecting current allocations and expenditures forward, a better grasp of whether the recent expansion of activities and financial commitments of the GOB for HAPP-5 implementation will prove to be financially viable over the long run. Further, any existing expenditure-revenue gaps bearing on financial viability will require the identification of possible ways to mobilise resources to remedy critical shortfalls.

Successful implementation of HAPP-5 requires efficient resource mobilisation for meeting HAPP-5 objectives. An effective resource mobilisation needs a close look at the current availability of resources. Future resource availability depends on currently available resources and the future growth rate of the economy as well as any possible shift of resources that may result from the success of other GOB initiatives, e.g., increased tax effort for expanding the domestic resource base, rapid privatisation of sick industries to release more resources, achieving higher growth in the export sector through increased foreign direct investment. Forecasts of current and future resource availability require a resource envelope model for estimation of resources at the macro level. Such a model consists of a series of equations to represent the basic structural relations in an economy, particularly those between saving and income and imports and expenditure.

The WHO has developed over a 10-year period macroeconomic simulation model; the “SimFin” is just such a model. The HEU uses that model for conducting a simulation of expected resources. It builds upon the International Bank for Reconstruction and Development (IBRD) simulation model “RimSim” but uses a detailed list of health sector variables, thereby permitting policy makers and planners to analyse the health sector within the macroeconomic environment. The PER uses this model, projecting alternative growth scenarios on the basis of economic growth, fiscal policies, and health expenditure financing in order to assess the financial outcomes of health policies.

This section presents updated estimates of the resource envelope for the health sector over the next five years (1998/99-2002/03) of HAPP-5. This is an attempt to update earlier versions of the HEU resource envelope estimation with greater precision, now that additional macroeconomic data for the variables have become available. The underlying assumptions of the model have been modified slightly in line with current economic trend. The current resource envelope, in effect, indicates how much resources GOB is able to devote to the health sector during the next five years, provided the stated assumptions of the modelling exercise hold true.

The expenditure plan of HAPP-5 is almost finalised. The expenditures for different cost-heads have already been calculated. Hence, it is now the appropriate time to compare quite directly the total projected expenditure of HAPP-5 with the total resource availability in order to assess any financing gaps.

Tables 14-16 show the MOHFW resource envelope within three alternative scenarios: a pessimistic scenario, a realistic scenario, and an optimistic scenario. The tables only present domestic resource envelope for the health and family welfare sectors during the five years of HAPP5 implementation.

Table 14: Pessimistic Scenario¹

Year	Domestic Resource Envelope	
	Tk. Million	US\$ Million (US\$1=Tk. 44.25)
1998/99	16488.75	372.63
1999/00	18753.98	423.82
2000/01	21171.37	478.45
2001/02	23788.15	537.59
2002/03	26728.37	604.03
Total	106,930.62	2,416.51

Source: HEU Estimates, November 1997.

¹ Slow economic growth rate and budget deficits assumed over the whole period of HAPP 5 implementation. Hence under pessimistic scenario, domestic resources earmarked for the health and family welfare sector would be relatively smaller.

The central assumptions behind the pessimistic growth based domestic resource envelope are as follows:

- *Salary adjustment not taken into account;*
- *Population growth rate declined from 2% in 1997/98 to 1.45% in 2002/03;*
- *GDP growth rate fixed at 5% during 1997/98 – 2002/03;*
- *Inflationary cycle (with a peak rate of 7.3%) will persist during 1998/99 and 1999-00. It will decline to 6% in 2000/01;*
- *The local currency will devalue from existing Tk.44.25/\$ to Tk.55/\$ by 2002/03;*
- *Fiscal policies will remain unchanged;*
- *Health expenditure will grow at 5.5% in real terms;*
- *Government expenditure will grow at 4% in real terms.*

Table 15: Realistic Scenario²

Year	Domestic Resource Envelope	
	Tk. Million	US\$ Million (US\$1=Tk. 44.25)
1998/99	17182.13	388.29
1999/00	20003.51	452.06
2000/01	23114.56	522.36
2001/02	26584.05	600.77
2002/03	30574.32	690.94
Total	117,458.57	2,654.43

Source: HEU Estimates, November 1997.

² This is the most likely resource envelope based on realistic economic growth rate and higher expenditure on health and family welfare sector.

The assumptions for realistic growth model are as follows:

- *Salary adjustment taken into account. Around 1,540 million Taka will be needed to implement the new pay scale in 1997/98 in addition to 7000 million Taka already allocated for pay and allowance in the Revenue Budget 1997/98. In effect, there will be about 20% increase in salaries in real terms;*
- *Population growth rate declined from 2% in 1997/98 to 1.45% in 2002/03;*

- GDP will grow at 5% in 1998/99 reaching 6% in 2001;
- Inflationary cycle (with a peak rate of 7.3%) will persist during 1998/99 and 1999-00 due to new pay scale implementation. It will decline to 6% in 2000/01;
- The local currency will devalue from existing Tk.44.25/\$ to Tk.55/\$ by 2002/03;
- Fiscal policies will remain unchanged;
- Health expenditure will grow at 7.5% in real terms;
- Government expenditure will grow at 4% in real terms.

Table 16: Optimistic Scenario³

Year	Domestic Resource Envelope	
	Tk. Million	US\$ Million (US\$1=Tk. 44.25)
1998/99	17419.66	393.66
1999/00	20560.43	464.64
2000/01	24086.55	544.33
2001/02	28084.91	634.69
2002/03	32748.01	740.06
Total	122,899.56	2,777.39

Source: HEU Estimates, November 1997.

³ High economic growth rate with macroeconomic stability and reduction in GOB subsidies assumed. Hence under optimistic scenario, there will be higher effort for domestic resource mobilisation as reflected by a larger domestic resource envelope.

The underlying assumptions are as follows:

- Salary adjustment taken into account. Around 1,540 million Taka will be needed to implement the new pay scale in 1997/98 in addition to 7000 million Taka already allocated for pay and allowance in the Revenue Budget 1997/98. In effect, there will be about 20% increase in salaries in real terms;
- Population growth rate declined from 2% in 1997/98 to 1.45% in 2002/03;
- GDP will constantly grow at 6% in 1998/99 – 2002/03 period;
- Inflationary cycle (with a peak rate of 7.3%) will persist during 1998/99 and 1999-00 due to new pay scale implementation. It will decline to 6% in 2000/01;
- The local currency will devalue from existing Tk.44.25/\$ to Tk.55/\$ by 2002/03;
- Fiscal policies will change slightly, which will generate more revenue for GOB;;

- *Health expenditure will grow at 8% in real terms with a higher effort to increase the domestic share;*
- *Government expenditure will grow at 4.5% in real terms with a higher effort to increase the domestic share;*
- *GOB will marginally decrease its expenditure on subsidies over time. This can be achieved if GOB can successfully privatise the sick industries.*

Diagrams 11, 12 and 13 organise the data in Tables 13-15, presenting the resource imbalance in terms of revenue-expenditure gaps in the GOB budget under the three growth scenarios.

Diagram 11: Revenue-Expenditure Gap: Pessimistic Scenario

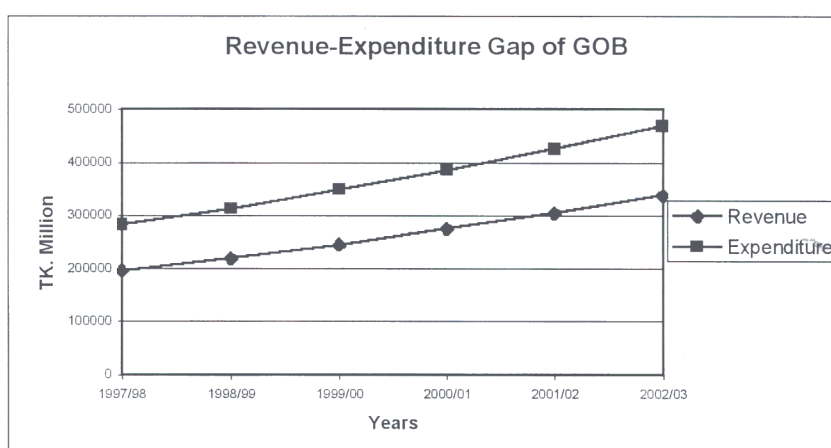


Diagram 12: Revenue-Expenditure Gap: Realistic Scenario

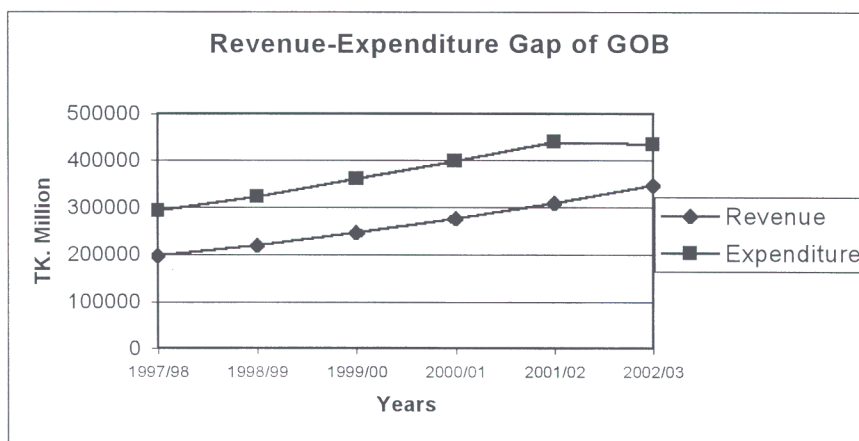
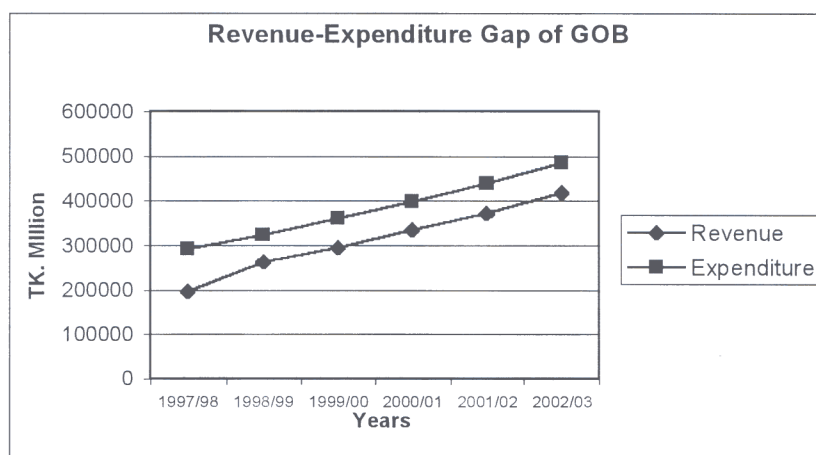


Diagram 13: Revenue-Expenditure Gap: Optimistic Scenario

The above diagrams make it evident that the GOB will face a persistent budget deficit over the years of HAPP-5 implementation. Can the GOB generate sufficient funds for successful implementation of the HAPP-5? The overall health and population sector allocations in the GOB budget (Both Revenue and ADP) are a function of the total resources. In order to meet the resource demands in a timely manner and above all, to adhere to HAPP-5 commitments, GOB will have to inject the funds needed for implementing the HAPP-5 by expanding its macro resource envelope.

The total health and family welfare sector domestic resource envelope could effectively be expanded if additional resources were mobilised through wide-scale implementation of various cost recovery measures. A study, conducted by the Health Economics Unit of MOHFW, suggests that around Tk. 15.43 million were collected through user fees from eight Medical College Hospitals and 55 District Hospitals in 1994/95. Moreover, implementing a rural health insurance system may potentially generate additional funds. Finally, if GOB can successfully privatise the sick industries and increase the domestic revenue mobilisation effort, and redirect part of the released resources to the health and family welfare sector, the total health and family welfare sector resource might be substantially increased.

F. Conclusions and Recommendations

It is a particularly crucial time for the GOB and its development partners. The GOB is contemplating sector-wide programme management under HAPP-5. GOB and its development partners have already committed themselves to this structural reform of the health and population sector. Such a reform shall, without doubt, call for a bigger overall financial commitment than previous health and population programmes. Given existing macroeconomic and socio-political problems of Bangladesh, it is vital that these financial resources are used in a manner that ensures their maximum impact and offers hope for their sustainability in the future. This section of the PER highlights the main issues of concern that have emerged from this review of the health and population sector, and makes recommendations about the way forward.

Health

During the last five years, the country has observed a remarkable growth in investments in the health sub-sector. Primarily, a reallocation of resources to the health and population sector by the GOB and development partner contributions has led to this expansion. PHC activities have attracted the major share of the investments made for health. In a poor country like Bangladesh, it is necessary that scarce resources be directed towards PHC activities since the benefits from PHC accrue to a larger segment of the population.

Nonetheless, it is apparent that, despite some success stories, progress towards some GOB objectives relating to reproductive and maternal health care has been slower than anticipated. Even with an expanded resource allocation to PHC activities, these targets remained unattainable.

Recommendations

- The GOB planning process needs to be strengthened further. Realistic targets in line with current macroeconomic performance should be set, so that they can be easily implemented.

- A National Health Policy needs to be formulated to provide clear guidelines to planners and programme managers. The government has already directed the concern authority to formulate a draft National Health Policy. It is envisaged that such a health policy would enable researchers and policymakers to evaluate health objectives more precisely and with a full view of funding equity.
- GOB should attempt to compile health-related databases that allow researchers and policymakers to monitor the policy relevant features of programme performance. ADB assisted National Health Accounts and ESP Costing Models are two examples developed already by the HEU.
- RIBEC has developed a comprehensive format to monitor and evaluate ADP projects. Such initiative should be made effective as early as possible and used both prospectively and retrospectively.
- During HAPP-5, there should be a mechanism to evaluate impact and sustainability of the programmes. An Annual Sustainability Assessment and Policy Review (ASAPR) can be one such tool. It allows not only to evaluate impacts and sustainability, but also to look at the equity and gender aspects of service utilisation and demand.
- Resource gaps during HAPP-5 will require new resource mobilisation schemes. Amongst the most meritorious of these schemes are: Health Trust, Health Insurance, Cost Recovery, and carefully targeted user fees. These should be designed, assessed and implemented. Moreover, NGOs and the private sector should be directly involved in delivering health care services to expand and complement public health care provision.
- The country's per capita debt burden is increasing gradually. This is mainly because most of the project aid and commodity aid entails loans that carry interest payments. Unless the overall economy takes a good shape, health sub-sector funding, which is a function of the whole economy, will be subjected to tremendous pressure in the future.

Population

The combined efforts of GOB and its development partners have made excellent progress toward goals for contraceptive prevalence and total fertility. Even though fall

of the population growth rate to below 2 percent per annum is a major success story, these gains have to be consolidated and sustained for realising a replacement level population growth rate.

In the population sector, we have observed a significant growth in the total amount of funds. A majority of that growth benefitted PHC. However, in the revenue budget, the GOB has not been able to increase its budgetary allocation substantially. Further, the development partners bear a part of the recurrent expenditures in the population sector. This is not sustainable since there are strong indications that in the future, the development partner contributions will reduce significantly.

Recommendations

- GOB should expand its fund allocation from the Revenue Budget to population activities in order to cover recurrent expenditures. Given the resource constraint already existing, it is however difficult for GOB to accomplish speedily. Nevertheless, resolving this problem can make population activities sustainable in the near term, if not in the long run.
- Cost recovery measures such as selective user fees, cost sharing, community financing, health trusts and health insurance should be implemented if GOB becomes unable to expand its funding capacity to the overall health and population sector.
- Finally, GOB should attempt to expand its ADP and Revenue funding for population activities in order to reduce donor dependency.

Equity in Public Health Expenditure

One of the main objectives of HAPP-5 is to highlight the equity and particularly gender equity of health and population expenditures. Currently, there exists an inequity in terms of access to and use of public health and population facilities. This equity is more pronounced when gender aspect is involved. Further, there exists inequity in terms of rural-urban residence.

Recommendations:

- Equity should be adequately addressed in forthcoming HAPP-5. A built-in mechanism to ensure and monitor equity should be in place. One such assessment mechanism can be an Annual Sustainability and Policy Review to evaluate indicators relating to allocative and distributive equity.
- Gender equity should be ensured in terms of access to and use of public health and population facilities. It is worth noting that HAPP-5 addresses the issue of equity from gender perspective and attempts to ensure gender equity in its comprehensive term.
- A Resource Allocation Model (RAM) should be developed on the basis of health care needs and expenditure in order to tackle the complex issues of equity related to geographic and income variations.

Future Resource Availability

Successful implementation of HAPP-5 calls for resource availability to meet HPSS and HAPP-5 objectives. An effective resource mobilisation needs a close look at the current resource availability, while future resource availability depends on currently available resources and the future growth rate of the economy as well as possible shifts of resources that may result from the success of other GOB initiatives. Thus, a simulation exercise is required to project future resource availability.

A simulation model, developed by WHO, suggests that there will be a potential resource imbalance in the form of expenditure-revenue gap during the HAPP-5 years. The results of this simulation exercise are dependent on some critical macro-economic assumptions.

Recommendations:

- GOB should adopt various resource mobilisation schemes such as direct cost recovery, health insurance, health trusts, health insurance, and other community cost sharing schemes to mobilise additional resources.

- GOB should find ways to redirect part of the resources from other sectors to health and population sector while raising the efficiency and quality of services and reducing the wastage in commodity distributions.

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