AN ASSESSMENT OF THE FLOW OF FUNDS IN THE HEALTH AND POPULATION SECTOR IN BANGLADESH

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Glossary

GOB	Government of Bangladesh
NGO	Nongovernmental Organisation
HEU	Health Economics Unit
MOHFW	Ministry of Health and Family Welfare
MCH	Mother and Child Health Services
CEA	Cost-Effectiveness Analysis
CBA	Cost-Benefit Analysis
PHP	Population and Health Project
THC	Thana Health Complex
MOSW	Ministry of Social Welfare
MOWA	Ministry of Women's Affairs
MOI	Ministry of Information
ADP	Annual Development Plan
PHC	Primary Health Care
ERD	Economic Relations Division, Ministry of Finance
SMC	Social Marketing Company
BIDS	Bangladesh Institute for Development Studies
BBS	Bangladesh Bureau of Statistics
RGA	Revenue Generating Activity
GDP	Gross Domestic Product
WDR	World Development Report
NDP	National Drugs Policy
WHO	World Health Organisation
NHA	National Health Accounts
UNICEF	United Nations Children's Emergency Fund
IDA	International Development Agency

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Executive Summary

Policy makers in Bangladesh are currently facing the challenge of formulating a realistic health and population strategy for the upcoming 5th Population and Health Project. One prerequisite for this venture is an understanding of the flows of expenditures in the sector. This study aims to provide a clearer picture of the macro funding of health and family welfare activities. It examines the sources and, where possible, the uses of revenue in the sector by tracing the channels of distribution. Yet, the study goes beyond a calculation of the *flow of funds* in the sector. It begins to analyse these funding flows from a standpoint of efficiency and equity and uses them to illuminate current policy issues.

After an initial introduction, Section B contains a discussion of the methodology used to estimate the sector's flow of funds. This is followed by an analysis of the objectives of GOB and donors which should drive such expenditures, in Section C. Sections D, E, and F then analyse the provision of resources, for the GOB financial year 1994/95, by the sector's major funders: the Government of Bangladesh (GOB), donors, and households. (Emphasis will be placed on those sectors not studied by previous HEU research.) The results are aggregated and summarised in Section G. Section H provides a brief comparison of the two main delivery vehicles for health; the public and private sectors and discusses appropriate forms of regulation for GOB. Section I sets forth conclusions to the study and draws out policy recommendations.

A brief summary of the main findings of this study is enclosed.

Priority Setting in Health Care Financing

- According to the 4th PHP and the preparations for both the National Health Strategy and a 5th PHP, GOB and consortium donors are agreed on the priorities of equity and health status maximisation within the sector. Recent documents in the preparation of 5th PHP seem to marry the two objectives into a goal of equitable access to a basic health care package.

Government and Donor Expenditure

- GOB resource allocation appears broadly in line with stated objectives. The proportion of expenditure going to the areas identified as priorities, PHC and MCH/family planning, showed an overall increase over the first half of the 1990s. Nevertheless, inadequate funding of *recurrent* activities in the health care infrastructure may well be contributing to under-utilisation at certain levels.

- Although GOB and the donor consortium have united objectives, as outlined in the 4th PHP, there are some differences in the pattern of funding. GOB allocated more funding to higher levels of the health care infrastructure while donors funded more population activities.

- Data on donor funding of NGOs are at present, approximate and occasionally conflicting. Information from twelve key donors and the NGO Bureau imply the sector was not larger than US$ 50 million in 1994/95, lower than some official sources.

Household Expenditure

- Average out-of-pocket expenditure by individuals on health and population services was estimated to be around US$ 3.4 per capita in 1994/95. Such spending is highly biased toward the richest 25% of the population. In addition, it was mostly directed to the private sector, and non-formal services in particular.

- Further analysis of household expenditure suggests significant gender biases for health care purchase. Allopathic care was bought for men and urban households more frequently than for women and rural households. It appears that those in the greatest need, women and rural dwellers, purchased the least *effective* health care.

Macro Flow of Funds

- The total funding in 1994/95 of the health and population sector was approximately US$ 855 million, equivalent to US$ 7.1 per capita (see Table I)or 3.1% of GDP. Some crude calculations reveal that 1994/95 spending on activities similar to those that might be covered in an essential package was around US$ 3 per capita.

- The largest single source of funding in the sector was household expenditure, almost 47% of total funding or over US$ 400 million in 1994/95. GOB was the next largest contributor with US$ 230 million and donors spent just less, US$ 220 million, through various channels.

- The public sector accounts for around 48% of total sectoral funding, just over US$ 400 million. Private sector activities receive marginally less funding, while the NGO sector appears quite small and specialised, though often highly effective.

The Private Sector and Regulation

- There appears to be little effective coordination of the public and private sectors, allowing sizeable scope for improving resource allocation through collaboration. The profit motivation of the private sector could be harnessed by GOB to improve efficiency in the sector.

Recommendations

GOB Regulation at Minimum Cost

Despite resource constraints, GOB has an important role in the co-ordination of the public and private sectors. In particular, GOB might pursue regulation activities which are cheap but effective. Financial incentives to private sector firms for their collaboration in the public sector could accompany budgetary reform to improve efficiency. The contracting

Table I: Flow of Funds - Expenditure Per Capita, 1994/95 US$

	Sources of Funding						
Providers	GOB	Donors - Food and Commodity Aid	Donors - ADP Funding	Donors - Total	Households	NGOs	**TOTAL**
Public Sector	**1.87**	**0.33**	**1.12**	**1.44**	**0.06**		**3.37**
- Tertiary Hospital	0.26	0.04	0.02	0.06	0.01		0.33
- Secondary Hospital	0.25	0.04	0.04	0.09	0.01		0.34
- PHC	0.64	0.11	0.12	0.23	0.02		0.90
- FP/MCH	0.50	0.09	0.80	0.89	0.02		1.41
- Other	0.21	0.04	0.14	0.18	0.01		0.40
NGOs	**0.02**			**0.38**	**0.05**	**0.02**	**0.47**
Private for Profit					**3.24**		**3.24**
- Medicine					2.64		2.64
- Qualified					0.20		0.20
- Unqualified					0.40		0.40
GRAND TOTAL	**1.88**			**1.83**	**3.35**	**0.02**	**7.08**

out of various services in hospitals and the development of different forms of health insurance are potential alternatives. In addition, empowering communities and individual consumers may be an effective way of regulating private sector activities. This could be assisted by giving consumers access to information and education. Furthermore, the GOB should continue its work in monitoring the quality of inputs into the system. Both human resource development and quality assurance in essential drugs are important areas of activity.

Consumer Education

Given the ineffective nature of much household expenditure, it will be important to **educate the population on the relative worth of different types of health care**. This is particularly important for poorer income brackets who tend to spend a higher proportion of their income on non-allopathic care. In turn, this will boost the demand for formal sector services, whether in the public or private sector, and encourage non-formal private sector providers to upgrade their activities.

Under-utilisation and Financing of Facilities

Under-utilisation of existing facilities is an indication that some GOB services do not have the confidence of households. This can be partly remedied by determining the unit costs of running facilities well. This would help GOB meet its stated objectives, as such unit costs could then be translated into the Revenue Budget and improve health services to those most in need.

Basic Package

Any adoption of a basic package, without substantial prioritisation of components, will require GOB to reallocate resources even more toward its stated objectives of PHC and MCH/FP activities. Given the gender biases in household expenditures, it may be particularly important to defend women's health interventions in any prioritisation of the basic package. Unless, this is done the goal of equity of access to basic health care will not be reached.

User Fees and Equity

The top 25% income bracket accounts for almost 60% of household expenditures on health. Even though an expansion of user fees is essential for funding a basic package of services, it may be difficult and potentially counterproductive outside of these richest segments of the population. Consequently, cost-recovery must be applied carefully with mechanisms to protect the poor, such as self-selection (Kawnine et al, 1996b).

National Health Accounts and Accountability

The work of this flow of funds study needs to be taken further. There are some sizeable gaps in data which prevent important analysis for policy makers. Indeed, there are several areas on which a National Health Accounts project should focus, namely; types of health service purchased in the sector, the funding of NGOs and the generation of comprehensive time-series data.

Section A: Introduction

Many countries are examining the need for health care reform, including Bangladesh. The perceived inefficiency of certain forms of existing provision has stimulated this mood of change. It is well understood that a country's health care system cannot afford inefficiencies where resources are few and needs outstrip existing capacity. Yet, successful health and population sector reforms require sound judgement, based on reliable and pertinent information. Health sector policy makers must be aware of the level and nature of need in a country; the availability and distribution of resources and the efficiency with which resources are used to meet objectives.

To improve the information available to policy makers in Bangladesh this study focuses on an analysis of the flow of funds in the health and population sector. It examines the sources and, where possible, the uses of revenue in the sector. It also traces the channels of distribution of the funds and allows us a clearer picture of the macro funding of health and family welfare activities. The study begins the process of measuring the availability, distribution and effectiveness of all the resources presently consumed by the health and population sector in Bangladesh. This task will be furthered by the National Health Accounts project, which we hope will overcome some of the data and resource constraints faced by this study.

The study is not confined, however, to a simple aggregation of funding data in Bangladesh. It tries to take a broader perspective on several issues surrounding the funding of the health and population sectors. What are the objectives of different economic agents? Are these objectives reflected in the flow of funds for Bangladesh? Is the current mix of the public and private sectors *optimal*, as revealed by the flow of funds? These are difficult questions for policy makers in Bangladesh and this study can and should only have the limited role of illuminating areas of debate from an economic perspective. Nevertheless, health economics can play an important role in highlighting the importance of incentive structures in the health and population sector. It is the incentives hidden in the current flow of funds which determine to a great extent existing efficiency in the sector and it is the manipulation of these incentives which will be the key to successful and sustainable health sector reform.

Following the introduction, Section B contains a discussion of the methodology used in the flow of fund analysis. Section C analyses the objectives of GOB and donors in the health and population sector, in order to provide a benchmark against which we can assess the present funding of the sector. Sections D, E, and F analyse the provision of resources by the sector's major funders: the Government of Bangladesh (GOB), bilateral and multi-lateral donor agencies, and households. (Emphasis will be placed on those sectors not studied by previous HEU research.) The analysis will involve a 'freeze-frame' picture of the flow of funds in the sector in the GOB financial year, 1994/95, which will be summarised in Section G. Armed with these results, the study asks whether the prevailing distribution of resources in the entire sector is consistent with GOB objectives and how GOB can improve the situation. One policy option is to harness the competitive forces of the private sector. Section H, therefore, will provide a brief initial discussion of the strengths and weaknesses of private sector provision of health care and of the costs and benefits of government regulation. Section I sets forth conclusions to the study and draws out policy recommendations.

Section B: Methodology

In presenting a flow of funds analysis of the health and population sectors, it is essential to state key methodological assumptions and principles. There are several issues which are important in both determining and understanding the results, including; the definition of health care, the time period for analysis and the quality of data. Each is discussed, in turn, in the remainder of this section

Definitions of Health Care and Population Services

For the purposes of this study, *health care* is defined very narrowly to include only clinical services, preventive or curative, provided to individuals. It is understood that there are many other factors which significantly affect health status, such as public sanitation, safe water supply, the quality of housing, working conditions and the environment. There are also many more factors which have indirect effects on the quality and quantity of life. Nevertheless, resource limitations necessitate a more focused approach. Consequently, this study concentrates on the type of services provided by the Ministry of Health and Family Welfare (MOHFW). Many of the data used in this study were obtained from secondary sources. Where possible, our narrow definition of health care was used but there are potential inaccuracies. Still, it is thought that these are unlikely to affect the main findings.

The high population density of Bangladesh and the traditionally high fertility rate make *health* extremely dependent on the growth rate of the *population*. Hence, in our macro funding flows analysis we count expenditures in both areas. Furthermore, family planning and mother and child health (MCH) services are conventionally examined together as the *population* sector in Bangladesh. We maintain this convention when examining public sector expenditure, for ease of analysis.

Static and Dynamic Analysis

There is sufficient available data on GOB expenditure to track its resource allocation in the health and population sector over several years. Unfortunately, this is not the case for other funding sources. The analysis of household expenditure, Section F, for instance, relies on periodic surveys carried out by different organisations, sometimes with inconsistent results. In addition, the data on donor funding to the NGO sector, included in Section E, varies widely within and across years. Consequently, the study is primarily limited to a *snap-shot* analysis of a single financial year, 1994/95, for its macro estimates. Nevertheless, dynamic analysis is conducted where data allow.

There are essentially two weaknesses with this *static* approach. First, the results can be distorted by large one-off fluctuations: either omissions or inclusions. For example, large capital projects can inflate the funding of a particular sector for a short period of time and lead to incorrect conclusions. Second, it is impossible to study trends. While there is no guarantee that trends will continue over time, they can provide evidence on which forecasts

can be made. It is hoped that with the establishment of GOB capacity to create and update National Health Accounts such dynamic analysis will be possible.

Quality of Data

Tracing fund flows to their destination is only worthwhile if it provides useful information on the efficiency of resource allocation. Unfortunately, as noted above, the measurement of flows is often constrained by a lack of consistency in the quality of available data. A potential trade-off exists between making the results as accurate as possible and making them as meaningful as possible.

The categories used to disaggregate the data on GOB funding are derived from previous HEU research (1995a, 1995b, 1996a). Similar disaggregation proved impossible for donor and private sector financing. In order to analyse the overall contribution made by the different sources of funds, a consistent and useful methodology needs to be applied comprehensively. This study disaggregates public sector expenditure data by the level at which health care is provided. This may be useful in so far as it reveals, within the constraints of the political economy, the priorities of different funding groups. It also allows an examination of the appropriate roles of public, NGO and private sectors in the delivery of health and population services.

Section C: Priority Setting in Health Care Financing

Introduction

In a world of scarce resources it is the responsibility of policy makers to finance services that will achieve the maximum benefit. To this end the GOB is developing its own National Health Strategy as well as preparing for the Fifth Population and Health Project. The aim of this section is to examine the process of resource allocation in public sector health care financing. It is the priorities of funding agencies which should guide resource allocation in the sector. Our flow of funds analysis can then assess the extent to which these stated priorities are actually reflected by expenditures. The first part of the section discusses priorities in health service delivery and financing, and demonstrates the theoretical and practical strengths and weaknesses of different approaches. The stated objectives of GOB and donors are then examined against this back-drop.

Competing Objectives in the Health Care System

Different objectives entail different priority setting mechanisms, and may result in vastly different resource allocations. The possible objectives for any health sector, identified by Hammer et al (1995), are:

- equity,
- maximising health status,
- maximising welfare.

It may be argued that there are often other objectives for any authority, such as employment creation, political stability and/or the reinforcement of rights. These may be conveniently subsumed under the category of welfare maximisation. The following discussion investigates the likely consequences of pursuing each of these three objectives in isolation. While an abstraction, it does help isolate the key features of each approach.

Equity

Equity is concerned with the *fairness* of the distribution of resources. Equity can be a goal in relation to access to services or treatment in services or even outcomes of services. It is a complicated and, often, little understood concept. In this context, and for simplicity, we refer to equity in terms of access to and financing of health care. Pursuing equity entails that the financing of a public health and population sector comes predominantly from the well-off and the benefits are aimed principally at the poor.

Policy makers cannot assume that the equity issue will resolve itself with economic development outside the very long run. To pursue efficiency exclusively in the health sector, would probably make the allocation of resources in any society even more unjust. Indeed, there is often a trade-off between equity and efficiency. In some circumstances, the most *efficient* result may be to help the non-poor, while the most *equitable* will not. For instance, the non-

poor may benefit more than the poor from certain surgical procedures because their general level of health is better and they are more able to benefit.

Maximising Health Status

One alternative approach is to maximise the overall health status of the population. To achieve this a government will provide the services which have the greatest impact on health per dollar spent. The cost effectiveness of different possible interventions is assessed and ranked. The interventions are then provided from the top down until the budget is exhausted.

As noted above, applying efficiency criteria, such as Cost Effectiveness Analysis (CEA), to achieve health status maximisation will often conflict with equity objectives. Furthermore, using CEA simplistically for national priority setting might not actually maximise health status. Planning in the public sector should be done with a knowledge of the operations and likely reactions of the NGO and private sectors. Otherwise, the true cost-effectiveness of interventions may be overestimated. In addition, a ranking of interventions often will not take into account the impact on effectiveness or costs of *interactions* between costs (Unger & Killingsworth, 1988). This too might distort apparent cost-effectiveness and undermine the achievement of the goal.

Maximising Welfare

Pursuing the objective of maximising health status is too narrow, according to Hammer et al (1995), because it misses some other important consequences that ought to considered within all public policy, such as fear of poverty. They argue that the objective of the health care system should be to maximise social welfare. According to Rannan-Eliya (1996), the Government of Sri-Lanka, by allocating the majority of the health sector budget to hospital inpatient care, prevented the spread of poverty and, therefore, maximised social welfare.

While this broader approach seems attractive there is a trade-off between welfare and health status. Put at its simplest, the welfare maximisation approach argues that other things are more important than people's health, in accordance with the desires, needs and values of society. In addition, the operationalisation of the welfare maximisation approach is difficult. Cost-Benefit Analysis (CBA) is sometimes used to try and measure welfare outcomes. Society's willingness to pay is derived and the project is worthwhile if its benefit is greater than its cost. Yet, there are many practical problems in implementation, including the appropriate valuation of health care benefits.

The Strategy of the GOB

It is clear from the preceding discussion that none of these three strategies is a *panacea* for all ills; each entails trade-offs and sacrifice and may be difficult to put into practice. How do these goals relate to existing and future policy in the health and population sectors in Bangladesh and can they throw some light on current options?

In the absence of a more explicit health and population strategy document, the Government's current objectives can be derived from the priorities identified in the Fourth Population and

Health Project (PHP), (World Bank 1991). A primary objective of the Fourth PHP is to lower the rate of growth of the population through fertility reduction, while improving the health status of women, in general, and maternal health, in particular. In addition, the 4th PHP holds important the health status of the under-5s and focuses priority on primary health care services.

From the above its is clear that *health status maximisation* is extremely important for the GOB and the donors in their implementation of 4th PHP. Nevertheless, there is an implicit *equity* objective in highlighting primary health care and treating many diseases associated with the poor.

Although the National Health Strategy and the Fifth PHP are still in the process of formulation, a discussion document, published by the World Bank (1995), outlines a number of issues that should be given consideration as key themes of the project. The central tenet of the document is an "essential package of services" to be financed by the public sector, which, it is hoped, will address a range of issues, such as:

- encourage the uptake of services aimed at meeting the health and reproductive needs identified as priorities,
- improve the quality of services without incurring large cost increases,
- improve the equity of resource allocation in the sector by funding "programs that serve primarily low-income groups and the poor".

The suggested basis for inclusion encompasses both *equity* and *health status maximisation* criteria. In that respect, the objectives appear similar to the 4th PHP. The following two quotations are also particularly telling:

> *[t]he Basic Health Services package should be consistent with international covenants to which Bangladesh is a signatory, such as the attainment of Health for All* (World Bank 1995).
>
> *[i]nterventions in the Basic Health Service package should have been shown to be cost-effective* (World Bank 1995)

They appear to suggest equitable access to basic health care as the primary objective, using CEA to achieve allocative efficiency. Focusing on the burden of disease in a country like Bangladesh implies services will be aimed at the diseases of the poor. The most cost-effective way to meet these diseases implies tying efficiency to specific equity objectives. The developing strategy in Bangladesh appears to be a more efficient way of targeting equity of access to basic health care than existing arrangements.

Both 4th and 5th PHP seemingly ignore welfare maximisation as a goal, at least in terms of explicit objectives. Are there any hidden welfare maximisation objectives? While public sector employment and political stability are evidently important to GOB do they actually have any impact in terms of the Flow of Funds in the sector? Indeed, the whole question of whether actual expenditure mirrors priorities is one to which we will return.

Summary

- The identification of objectives in a health and population sector is crucial to the process of resource allocation. Funding flows will often reveal actual priorities and should reflect stated ones.

- According to the 4th PHP and the preparations for both the National Health Strategy and a 5th PHP, GOB and consortium donors are agreed on the priorities of equity and health status maximisation within the sector. Recent documents in the preparation of 5th PHP seem to marry the two objectives into a goal of equitable access to basic health care, using CEA as a tool for its achievement. Welfare maximisation, considered separately, is not included.

Section D: Government Expenditure

Introduction

The GOB's allocation of resources to the health and population sectors has been relatively well covered in the last two years by the research papers of the HEU (HEU 1995a, HEU 1995b, HEU 1996a). In order to avoid replication, this section will build on existing research to analyse GOB's allocation of resources in the sector in 1994/95. Where possible, time series data will also be analysed to place 1994/95 in its appropriate context. Before such analysis, it is useful to discuss methodology, particularly where it differs from previous HEU research.

Methodology

Total Funding of Health and Population

The analysis of GOB funding of the health and population sector relies largely on the data used in previous HEU research papers (*ibid*). This concentrates entirely on the funding activity of the MOHFW, and its two directorates. While this is accounts for the vast majority of funds going to the sector from GOB, it is not comprehensive. To supplement existing data the study investigated funding from other ministries, such as the Ministry of Social Welfare (MOSW), the Ministry of Women's Affairs (MOWA) and the Ministry of Information (MOI).

Disaggregation of the Data

HEU Research Papers 1 and 2 analysed the ADP and Revenue Budgets separately. Only spending in the Revenue Budget was disaggregated into primary, secondary, tertiary and MCH/family planning services. This Flow of Funds study has disaggregated both budgets fully and analysed them together. As in previous documents the definition of PHC has been derived from all expenditure incurred at the Thana level and below with some component of head-quarters' expenditure for administration and training. Operational definitions of PHC are always somewhat arbitrary and there is, to date, no consensus on this issue.

Public and Private Sector Co-operation

Allocations in the ADP budget have traditionally been assumed to fund services provided by the public sector. There is, however, a degree of co-operation between the Non-Government Organisations (NGOs) and the public sector within the ADP:

- The Ministry of Social Welfare funds a few NGOs in their provision of health care.
- Many GOB family planning workers liaise closely with NGOs. This results in complimentary activities if not shared resources.

Indeed, some of the GOB resources are effectively funding or subsidising services provided by NGOs, and vice versa. It is difficult at present to measure completely the effective support of NGOs through the ADP.

Food and Commodity Aid

A slightly different approach to previous HEU research has been taken with the treatment of food and commodity aid. This study assumes the GOB treats this source of revenue the same as any other, and uses it in the same proportions as other revenue. Hence, it purchases services in the health and population sector using this aid, through both the Development and Revenue budget.

The strength of this approach, which was alluded to in the *Public Expenditure Review* (HEU 1995b), is that it assumes GOB expenditure takes account of the services purchased using food and commodity aid. Hence, GOB reallocates expenditure to the next priority when services are financed using food and commodity aid.

Cost Recovery in the Public Sector

According to official practice and legislation, the fees charged by GOB hospitals are returned to the Ministry of Finance. For the purposes of this study, then, this flow of funds is treated as household funding of public sector provision. As with food aid and commodity aid it is assumed that the GOB allocates it in the same proportions as the remainder of public expenditure in the sector.

The GOB's Resource Allocation

Diagram 1: GOB resource allocation in the Health and Population Sector, 1994/95 US$m

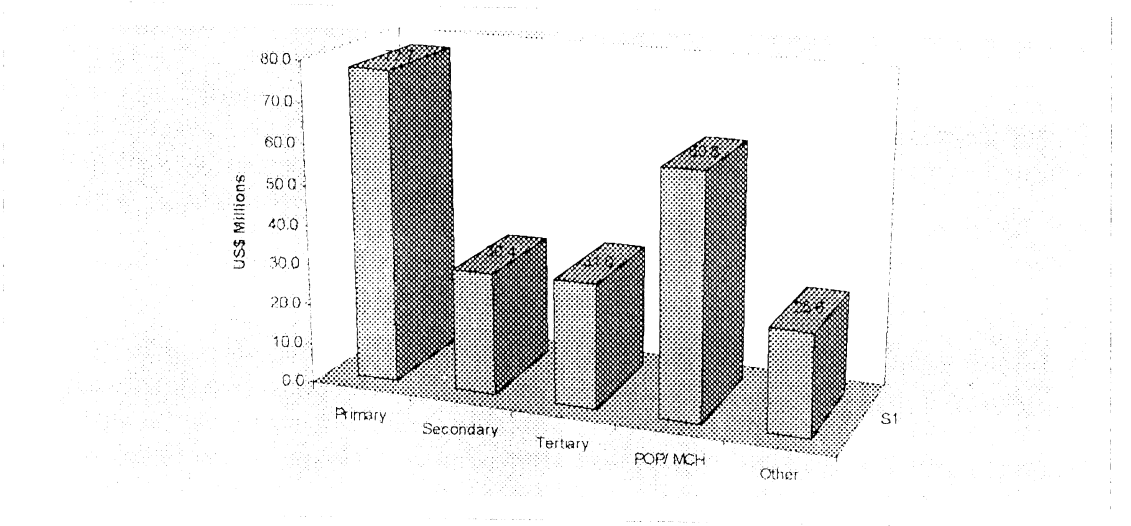
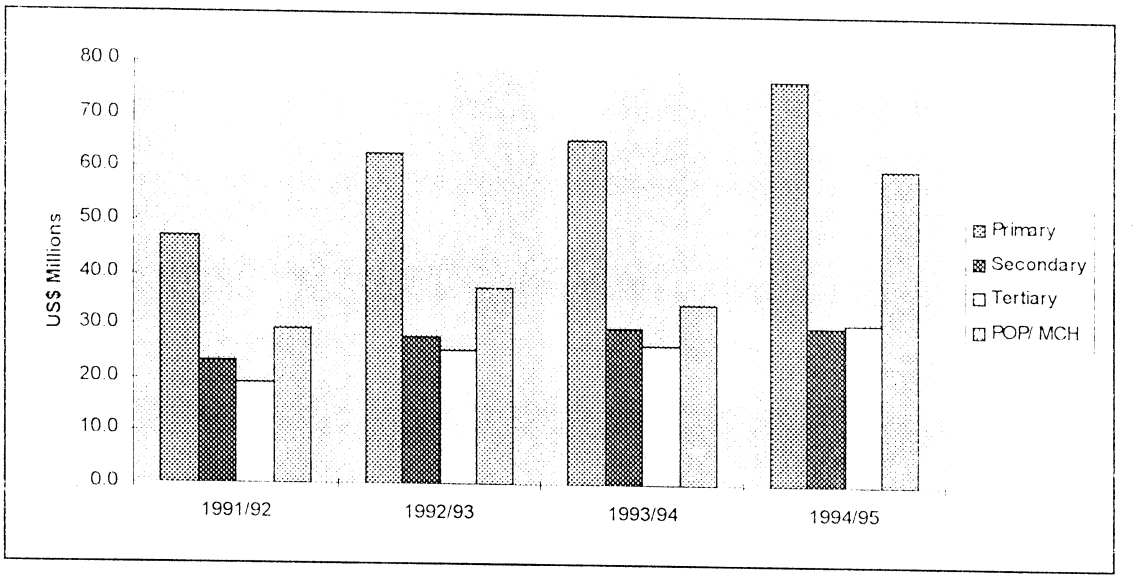


Diagram 1 notes the division of GOB 1994/95 funding, just under US$ 230 million, to different subsectors of health and population. The largest recipient of GOB expenditure is primary health care and MCH/family planning services. Excluding the population sector, PHC was allocated almost half of all resources, consistent with earlier HEU research (HEU 1995b). Relatively few public facilities provide tertiary level care, yet they receive almost 20% of the health sector budget, roughly the same as secondary level care.

Diagram 2: Distribution of Expenditure since 1991/92



A particular concern identified by the *Public Expenditure Review* was whether the GOB would be able to achieve the necessary increase in allocations to the PHC sector, following the extensive investment in infrastructure in the late 1980s (1995b). Diagram 2 provides a partial answer. It demonstrates that PHC, and the population sector, saw a significant increase in the proportion of expenditure in the period 1991/92 - 1994/95. Expenditure on PHC has increased in real terms by approximately 60% over these four years. Nevertheless, recent data suggest that this trend has not continued. In addition, GOB funding of PHC in the *Revenue Budget* was broadly stagnant over the same period (HEU 1995b). While, there is evidence to support a change in expenditure priorities in the ADP Budget to reflect GOB priorities (section C), it seems that the Revenue Budget lags behind. If not rectified, this may lead to underfunding of the operating costs of existing facilities. **A lack of maintenance, supplies and effective manpower will do nothing to boost low utilisation at Thana Health Complexes.** The increase in MCH/family planning services, another priority area, appears to be even more impressive, approximately 100% between 1991/92 and 1994/95. Yet, this was largely the result of a very large increase in population sector spending in the ADP Budget in 1994/95, and may be an aberration.

Summary

- GOB resource allocation appears broadly in line with stated objectives. The proportion of expenditure going to the areas identified as priorities, PHC and MCH/family planning, showed an overall increase over the first half of the 1990s. Nevertheless, inadequate funding of recurrent activities in the health care infrastructure may well be contributing to under-utilisation at certain levels. Indeed, the lack of maintenance, supplies and effective manpower may well undermine the effectiveness of GOB's investments in the sector.

Section E: Donor Expenditure

Introduction

The procedures donors use to fund the health and population sector in Bangladesh are many and complex, but they can be categorised into five different types for this study

I. Donations of food and commodity aid,

II. Funding of projects through the Government's Development Budget,

III. Funding of public sector activities outside the Government's Budget,

IV. Funding of NGOs and the not-for-profit private sector[1].

V. Funding of the commercial private sector

In order to measure and analyse donor funding of the sector by such funding categories, data were requested from thirteen donors who were thought to be the largest contributors. The quality of data in their replies was highly variable, and one donor refused to provide any data at all. Published data from the Economic Relations Division (ERD 1995) in the Ministry of Finance was not sufficiently disaggregated to compliment individual donor returns, whereas data published by the NGO Bureau (NGO Bureau 1995) was used to provide rough estimates of funding of NGOs in 1994/95. Data already held by the HEU, regarding the distribution of expenditure within the ADP, was also analysed. The following paragraphs will consider, in turn, each of the mechanisms used by donors to fund the health and population sector, discussing the quality of the data as well as the results.

Food and Commodity Aid

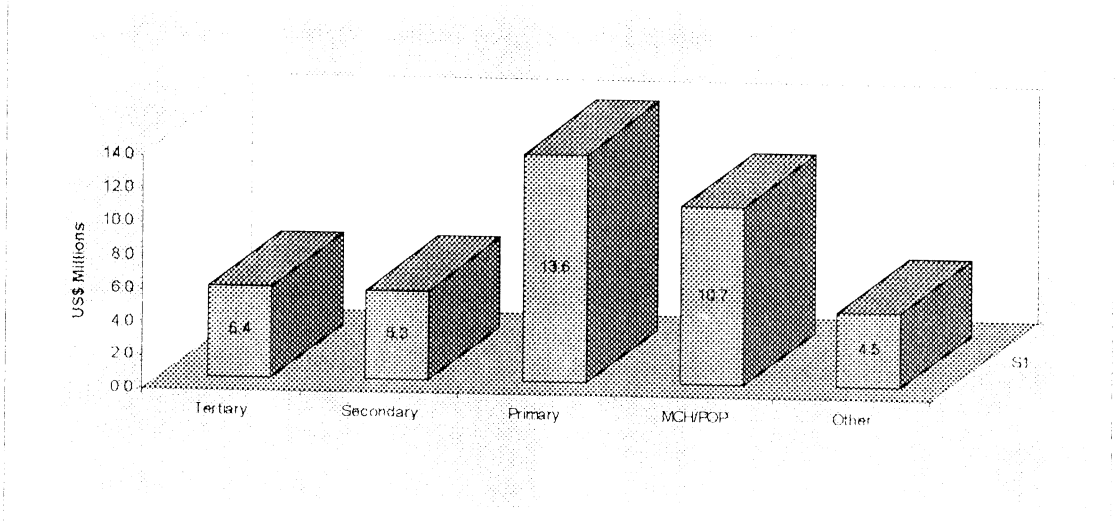
Food and commodity aid for the health and population sector in 1994/95 was approximately US$ 40 million. This accounts for just less than one fifth of donor funding of the sector, or just under 5% of the entire sector. It is also worth noting that health and population sector services funded by food and commodity aid show up in the Government's budget as over 1% of the entire public sector budget. Diagram 3 indicates the distribution of expenditure of food and commodity aid, among the subsectors. It is assumed to be in the same proportions as all Government expenditure in the health and population sector, perhaps representing Government priorities more than donor priorities. (Still, the fact that donors continue to provide this aid implies that the services it funds are to some extent consistent with their own priorities.) Even where the proceeds of such aid are tied to particular projects, this frees up resources for GOB to spend where it deems fit.

As suggested in HEU Research Paper 3, this type of aid will decrease in the future barring any natural disaster. What kind of impact will this make to the sector? It is interesting to note that the proceeds of this type of aid were sufficient in 1994/95 to purchase all new equipment and

[1] Funding of the not-for-profit private sector primarily consists of subsidies to the Social Marketing Corporation (SMC).

finance all the construction activity in the health sector. Their absence will be missed even if other forms of revenue growth are healthy.

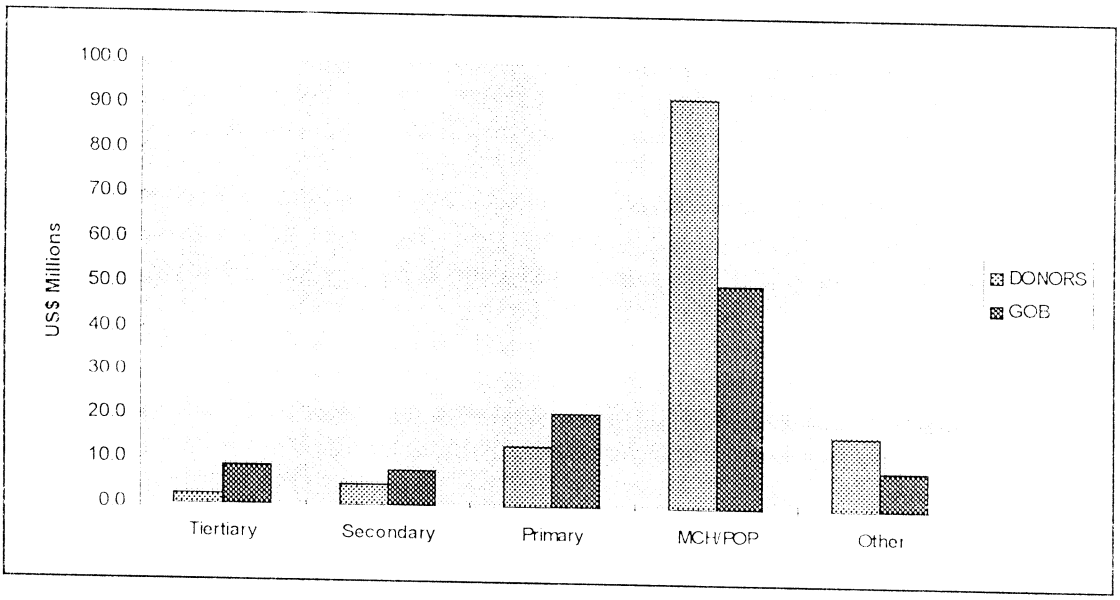
Diagram 3: Services Financed by Food and Commodity Aid, 1994/95 US$m



Funding of Projects through the Development Budget

Using the methodology in Section D, we now analyse donor funding of the ADP. The same limitations also apply: imprecise allocation between different levels of health care, and a tendency to categorise funding as solely public sector. Nevertheless, Diagram 4 indicates a comparison of donor and GOB funding activities.

Diagram 4: Donor and GOB Funding of the Development Budget, 1994/95 US$m



It is apparent that population sector activities in the Government's Development Budget receive a larger proportion of their resources from donors. Correspondingly, the Government allocates

more funding to all levels of health care than donors. While, in aggregate, the data reveal similar objectives it appears that GOB has decided that it has an important role in funding the development of the health care infrastructure, and its expansion, while the population sector has largely been left to donor funding.

Funding of Public Sector Activities outside the Budget

Donor funding of public sector activities outside the Development Budget includes extra project resources agreed over-and-above the ADP and, in some cases, contraceptive supplies to public sector providers. Unfortunately, the precision with which donors were able to report this type of funding varied greatly. Apparently, the accounting mechanisms used by some donors makes it very difficult to analyse the end-uses to which their resources were put. Even where the information was available there were often concerns about confidentiality. Many donors warned that the quality of the data should be treated with caution. Still, the ADP contains the majority of development activity thanks to recent efforts by the Planning Commission. This may cause less concern for this study over the apparent shortage of data on this type of funding.

Donor Funding of NGOs

The NGO sector in Bangladesh is large and well-established. Recent concerns about donor fatigue, sustainability and the cost-effectiveness of both the public and NGO sector have raised questions about the future role of NGOs. To facilitate informed decision making it is vital to determine how important the NGO sector is to health and population in Bangladesh. Although this study cannot address this issue in detail, it can estimate the amount of funds flowing through NGOs. Nevertheless, available sources of data provide differing estimates of such funding flows. One official estimate for the year 1992/93 appears to suggest that it is in the region of US$ 100 million. Other sources suggest a far lower level of funding.

The approach taken in this study has been to add up the expenditures to individual NGOs rather than relying on existing official figures. A key data source for this approach was the *NGO directory* for 1994, published by the NGO Bureau. Officially, this details the name, objectives and funding levels of all NGO projects. By making assumptions about the distribution of expenditure within projects, we were able to estimate funding of NGOs in the health and population sector in 1994/95. Our initial estimate, using this method, was rather small, approximately US$ 15 million. Cross referencing this document with data supplied by key donors, suggested a higher level of aggregate funding of NGOs, around US$35 million in 1994/95. The latter was taken to be a more reliable estimate given potential problems of limited coverage in the NGO Bureau document. The projects that could be cross referenced between the two sources suggested some level of agreement. Donor funding of the SMC accounted for approximately US$ 11 million of the difference. (N.B. The SMC has been included with NGOs to distinguish it from the for-profit private sector. It is understood, though, that the SMC operates using private sector practices.)

There are several good reasons to believe that the US$ 35 million is still an under-estimate of the size of the NGO sector.

- Only thirteen of the largest donors were surveyed and one did not supply data. It is likely, therefore, that there exists more unaccounted funding.

- The NGO Bureau's much higher estimate for 1992/93, although uncorroborated, suggests more NGO activity.

- There is some funding of NGOs through the ADP.

Consequently, we have raised our estimates of donor funding of the NGO sector to around US$ 46 million for 1994/95, based on the additional known ADP funding of NGOs and an assumption concerning the funding concentration of NGOs in the health and population sector. This brings the total donor funding of the sector to approximately US$ 220 million for 1994/95. These estimates must suffice until a more detailed picture of the NGO sector can be drawn with the help of National Health Accounts.

Summary

- Although GOB and the donor consortium have united objectives, as outline in the 4th PHP, there are some differences in the pattern of funding. GOB allocates more funding to higher levels of the health care infrastructure while donors fund more population activities. Any adoption of a basic package, without substantial prioritisation of components, will require GOB to reallocate resources even more toward its stated objectives.

- Data on donor funding of NGOs are, at present, approximate and occasionally conflicting. Nevertheless, the bulk of the available evidence points to a lower estimate of the financial flows into NGOs than indicated by one official source. Information from twelve key donors and the NGO Bureau imply the sector was not larger than US$ 50 million in 1994/95.

Section F: Household Expenditure

Introduction

This section summarises the available household expenditure data on health and population. Individuals as consumers contribute to the financing of the health sector when they purchase health care services from providers. The section will begin with a brief discussion of the size and distribution of household contributions to the sector. Next, the volume of expenditure going to different providers will be summarised. Finally, there will be a very brief outline of the type of goods and services individuals are purchasing.

Household Expenditure and its Distribution

In order to strive for consistency and accuracy, a number of sources of data were compared. There have been four substantial surveys of household expenditure on health care published in recent years, with the following results[1]:

Organisation	Year	H/H Expenditure (US$/mo)
BIDS (1988)	1988	1.99
BBS (1991)	1988/89	1.39
BBS (1995a)	1991/92	1.51
BBS (1996)	1994/95	1.43

The most recent survey by the Bangladesh Bureau of Statistics (BBS) is used as the primary source for calculating the relevant contribution of households in this study. BBS results are fairly consistent and the 1996 study makes explicit the proportion of expenditure on travel. This is excluded from our calculations. Nevertheless, certain problems remain and it is unclear whether the data include the expenditure on health by Bangladeshi households in foreign countries. Although reliable estimates do not exist, it is widely thought that well-off households purchase some health care abroad. Still, this is unlikely to have a significant impact on the aggregate results.

In 1995 the population of Bangladesh was approximately 120 million, with approximately 5.1 people per household, implying around 24 million households. The total spending by individuals on heath care in 1994/95 was over US$ 400 million or almost US$ 3.4 per capita. Although this figure may reveal the average per capita expenditure it tells us little about the distribution of total purchasing power between different income groups, geographical bases or genders. We shall start to explore each of these in the following paragraphs

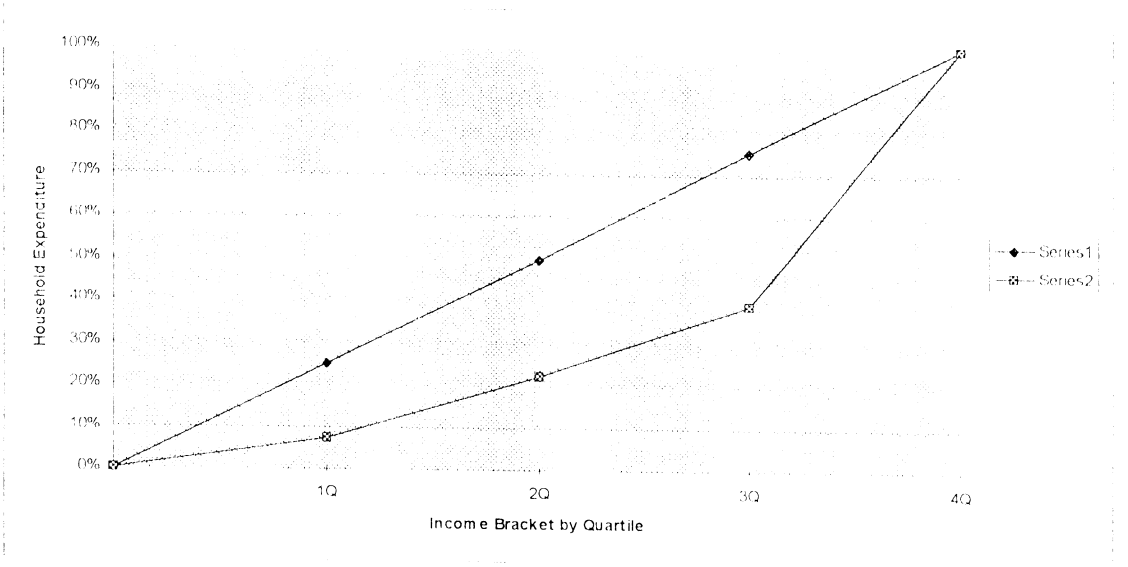
First, we turn to the distribution of expenditure on health care, including expenditures on allopathic and non-allopathic care. How does household funding of health care divide up among different income segments of the population? Diagram 5 displays the data in the form of a *Lorenz* curve. The proportion of total household funding of the health and population sectors is shown on the *vertical axis*. The income brackets of households in Bangladesh from the poorest, on the left, to the richest are shown on the *horizontal axis*. Series 1 indicates the

[1] The figures in nominal Taka were converted into real US$ using the exchange rate in 1994/95, to prevent the spending power of the earlier figures being exaggerated by the falling exchange rate. In 1988 the exchange rate was approximately 20% lower than in 1994/95.

idealised case of perfect equality of expenditure on health. Series 2 shows the actual data for Bangladesh. It demonstrates that by far the largest contributors to health care financing in 1994/95 were the richest quartile. Indeed, there was relatively little purchasing power in the bottom three quarters of households. The latter only accounted for 40% of household expenditure or around US$ 160 million. Even more alarming is the fact that the poorest quartile of the population spent less than 10% of the total or less than US$ 40 million on health and population services, approximately US$ 1.3 per capita per year. (The introduction of a basic package must heavily subsidise such groups.) Even this may overestimate the *ability* of the poorest quartile to pay where depletion of assets and borrowing were necessary to finance their health care. It appears then that there is an inegalitarian distribution of household expenditure on health care.

Furthermore, a closer examination of the data, provided by BBS from 1991/92, reveals that the *proportion* of expenditure going to health care from households shows no evidence of a systematic increase, except for the highest three to five income groups, out of nineteen. In all groups, expenditure on health care was between 1.5% and 3% of total expenditure.

Diagram 5: Distribution of Household Expenditure by Quartile - sorted according to income.



What are the implications of these findings? In terms of vertical equity in the financing of health services by households, the 1994/95 expenditure profile is only marginally progressive. If GOB wishes to promote equity, an expansion of health care financing from the richest quartile would be most appropriate. Conversely, given the need to expand the resources available to the sector to fund reforms and the provision of a basic package, the Government should avoid placing a burden on the poorest segments of society. The pool of resources available from the poorest quartile is very small - under 10% of the total expenditure on health care.

It is also vital to consider the inequality of expenditures on health between *genders* and between *urban* and *rural* areas, drawing on the latest BBS data. Table 1 compares the amount of health care expenditure on men and women within rural and urban households. *Three* different income groups are compared, to control for the effect of income on household health care expenditure and to compare households with different economic constraints.

Table 1: Distribution of monthly expenditure on health care in US$[2,3].

1. Households with monthly income of US$ 19 - 25

	Rural	Urban	National Average
Women	0.17	0.22	0.17
Men	0.23	0.12	0.22

2. Households with monthly income of US$ 63 - 75

	Rural	Urban	National Average
Women	0.49	0.59	0.51
Men	0.58	0.63	0.59

3. Households with monthly income of US$ 250 - 313

	Rural	Urban	National
Women	1.54	2.56	1.88
Men	2.34	5.42	3.36

Source: BBS (1995a)

Essentially, two conclusions can be drawn from Table 1:

I. Men were accountable for a larger proportion of the household's expenditure on health care than women, apart from the poorest income group in urban areas. This gender inequality was particularly pronounced for the richest group.

II People living in urban areas allocated a larger proportion of their income to health care than those living in rural areas, except for urban men from the poorest income group

Although women and rural communities have the highest rates of morbidity and mortality, they spent fewer resources on health care. Such conclusions would tend to support other evidence that households value the health of men higher than that of women. This may be partially to do with gender bias and the perceived higher income potential for men. The results highlight the need for GOB to intervene and protect the health care of women, where appropriate. Such interventions would both assist health status maximisation and equity.

Table 2 notes that expenditure on allopathic medicine was higher for men than women. It was also preferred by urban dwellers over rural households, and by higher income groups. Furthermore, assuming allopathic medicine is generally more effective than 'traditional' health services, the quality of care purchased was also inversely related to the level of need.

Diagram 6 makes the point clearer, by showing for each income bracket the proportion of monthly expenditure allocated to non-allopathic care. We have already noted that poorer households spent only a fraction of the resources of their richer counterparts. It is, therefore, even more disturbing to see that they allocated a larger share of their expenditure to traditional health care, with an associated lower return. Education of households on the efficacy of

[2] Exchange Rate: 1 US$ = 40 Taka.

[3] These data represent the average expenditure on the men and the women in each household. They are only comparable if there is an equal number of men and women in the household.

different forms of medicine would seem to be essential. Only in this way can poorer households guarantee maximum impact on their health from their small pool of resources.

Table 2: Distribution of monthly expenditure on allopathic health care as a proportion of the total

1. Households with monthly income of US$ 19 - 25

	Rural	Urban	National Average
Women	87%	95%	88%
Men	89%	98%	92%

2. Households with monthly income of US$ 63 - 75

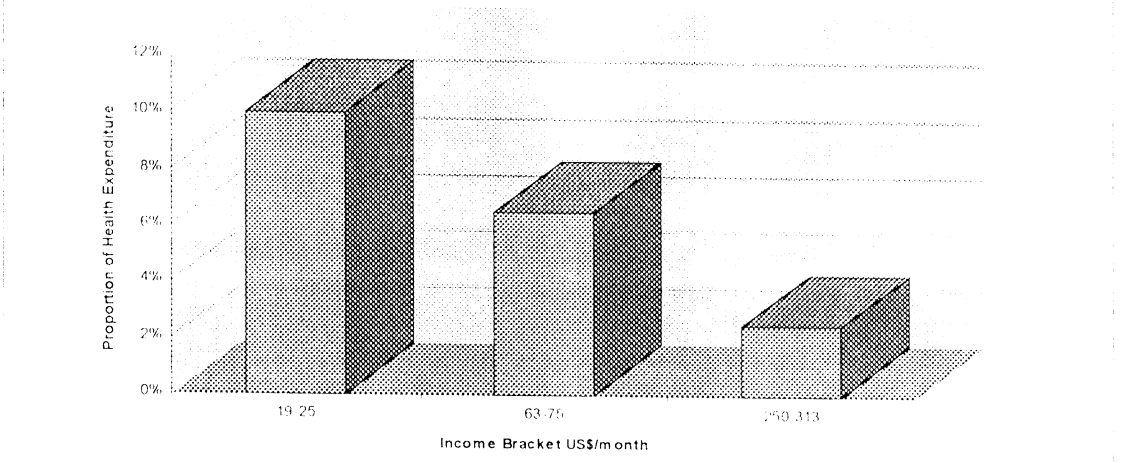
	Rural	Urban	National Average
Women	92%	95%	93%
Men	94%	95%	94%

3. Households with monthly income of US$ 250 - 313

	Rural	Urban	National
Women	94%	99%	97%
Men	97%	98%	98%

Source: BBS (1995a)

Diagram 6: Proportion of Expenditure on Non-allopathic Care, by income bracket



The Destination of Expenditure

Sufficient data is not available to assign confidently the aggregate level of expenditure to different providers. The following analysis includes many assumptions which need to be refined by further research. Nevertheless, an attempt will be made to estimate household expenditure

which purchases services provided by the public sector and NGOs. The remainder will be assumed to be revenue for the for-profit private sector.

Funds collected by public sector providers are published as part of Government revenue in the *national accounts*. The most recent estimate available is US$ 7 million for 1993/94, (BBS 1995b). To use this figure as an estimate of household expenditure on public health services requires that all the *unofficial* fees paid at Government facilities (HEU 1996c) be defined as private sector. Although many of these unofficial fees are paid by households in public facilities, it may be legitimate to describe them as private sector activity operating within the public sector. The provision of services that these fees bring may then be thought of as a private sector supplement to the public sector. Based on the data collected in HEU Research Paper 4, this could be as high as 10% of the recurrent costs of Medical College Hospitals and District Hospitals, if medicine is included.

There is very little available data on the level of *cost recovery* by NGOs. Any estimate of the proportion of household expenditure on health care going to NGOs, and the level of resources generated by NGOs through other activities to provide health care, must be treated with extreme caution. The only available quantitative study of the sector's cost recovery was by Masud in 1993. (Table 3 displays the results by different services, based on a survey of 54 NGOs, approximately 20% of the total population.) Many NGOs are reluctant to divulge information on the resources they manage to recover from the community and this casts doubt on the results of Masud's survey, while also making further investigation difficult. Nevertheless, an estimate will be made using Masud's study and some independent investigations, much of which consisted of "off the record" interviews[4] with NGOs and their umbrella organisations.

Table 3: Cost Recovery by NGOs

Service Provided	Free Service	< 10%	10 - 30 %	Full Cost Recovery
Clinical	12%	57%	28%	0%
MCH	37%	50%	5%	0%
Immunisations	64%	24%	0%	3%

Source: Masud 1993

These results demonstrate that few NGOs in the health and population sector recover a third or more of their costs, and most recover no more than a token amount. For several years NGOs have come under increasing pressure from donors to improve their financial sustainability partly by increasing cost recovery and partly by improving efficiency. The desirability of this approach depends on the effect on the quality and quantity of output as well access to services by the poor. If cost reductions are not achieved purely by efficiency improvements and user fees are not introduced selectively then there may be little benefit to the consumers most in need.

There is evidence that the level of cost recovery has increased over the last three years, partly through the increased use of fees for service, but also through NGO revenue generating activities (RGAs) in other sectors. Many NGOs operate a variety of activities, some of which are much more amenable to cost recovery. Resources raised through commercial activities and loan repayment can often be used to cross-subsidise the delivery of health and family planning

[4] The delicate nature of this data necessitates confidentiality.

services. In such a way households contribute to the health and population sector by purchasing services in other sectors.

Overall, NGOs probably recover between 5% and 10% of their costs through fees, and the same amount through revenue generation. Assuming that sector wide self-generation of resources was 10%, through fees and RGAs, households financed the NGO sector by approximately US$ 5.5 million in 1994/95. Subtracting the cost recovery by NGOs and GOB from total household expenditure, left approximately US$ 390 million for the private sector.

The Nature of the Services Purchased

According to Masud's survey (1993), there are approximately 250 NGOs providing services in the health and population sector in Bangladesh. The research by Masud found the most common services provided to be, Mother and Child Health (74% of NGOs surveyed), immunisations (40%), clinical services (35%), and other services such as health education and diarrhoea prevention. Unfortunately, the available data is not sufficient to estimate the particular services purchased from these providers through household expenditure. Still, the apparently small amount of revenue collected by NGOs might suggest that households are rather unwilling to pay full cost for basic services. By implication households spend more of their money on more specialised curative care.

Can we say anything more about the services that households are willing to spend their money on? According to BBS (1995a), only 5% of household expenditure went to non-allopathic health care. After expenditure on public and NGO services are removed from the household expenditure figures (BBS, 1996), approximately 80% purchased medicine. The remaining 20% is difficult to allocate meaningfully. It is estimated that approximately 3.5 times more treatment was provided by unqualified doctors than qualified doctors (BBS 1996). Reliable data on the relative cost of qualified and unqualified doctors is not available. For this relatively small amount of expenditure, it is arbitrarily estimated that qualified doctors cost 50% more. If these extravagant assumptions are made, for 1994/95, the US$ 391 million of household expenditure on the private sector can be distributed in the following way: US$ 319 million was spent on medicines and supplies, US$ 48 million on unqualified doctors and US$ 24 million on qualified doctors.

Summary

- Average out-of-pocket expenditure by individuals on health and population services was estimated to be around US$ 3.4 per capita in 1994/95. Such spending was highly biased toward the richest 25% of the population. Even ignoring the problematic effects of asset depletion and borrowing, the poorest quartile spent less than US$ 40 million on health and population services in the same year. Indeed, there is little purchasing power or room for cost-recovery in the poorest three quarters of the population.

- Further analysis of household expenditure reveals that households spend more on health care for men than women; households in urban areas allocate a larger proportion of their expenditure to health, and that allopathic care is bought for men and urban households more frequently than for women and rural households. It tends to be the case that those in the greatest need, women and rural dwellers, purchase the least *effective* health care.

- Given the small amount of cost-recovery from NGOs and GOB it appears that households spent almost 95% of their resources in private care. By implication much of this is curative and spent on the purchase of medicine. Given the provider contact with the formal health sector is limited, the effectiveness of such expenditure is highly questionable.

Section G: Summary of Results

Introduction

The aim of this section is pull together the results of Sections D, E and F into a macro flow of funds picture for the health and population sector in Bangladesh. The results will not only show the total size of the sector but will also compare the funding of the sector by different sources: households, donors, and the GOB. Finally funding flows to the public, private-for-profit and NGO sectors will be compared.

The Macro Flows

The aggregate picture of funding flows in the health and population sector is shown, in schematic form in Diagram 7. The diagram demonstrates for 1994/95 the key agents in the sector and analyses the resource flows among them. The key *funders* are noted by a box with a double outline. Ultimately, the GOB must derive all its resources from households through the tax base, commercial activities and aid flows, but for the purposes of this analysis the GOB is treated as a separate funder. The *channels* of funding are then revealed by arrows, with the amount stated in a text box. In some cases the picture is stylised to avoid the complexity of the actual situation. For instance, different donors provide project aid in different ways, while in the diagram we have directed all donor assistance to projects through the MOHFW. **The flow of funds, therefore, should not be seen as an exercise in budget documentation and release, but an analysis of sources, channels and uses of funds.** It does not assess the mechanics of different methods of funding but is a policy-oriented tool to give information on resources and their use in the sector.

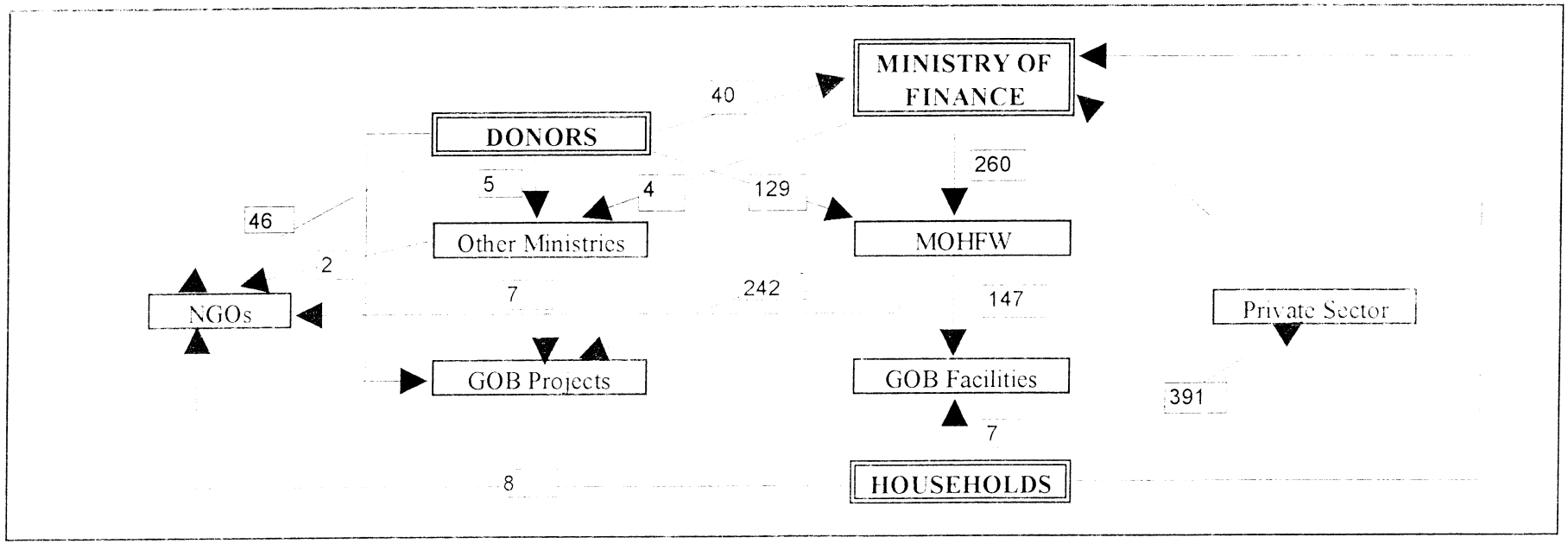
There are some arrows revealing flows between institutions where either data were not available or were not considered important for the study. For instance, it is not clear how much private firms pay to the GOB in terms of corporate taxation. In addition, the arrow showing household flows to the NGO sector includes not only cost recovery from health sector activities but also cost recovery in other sectors, which NGOs use to subsidise their delivery of health care and population services.

The aggregated data from the preceding chapters are set out in Tables 4-7 and reveal that, in 1994/95, a total of US$ 855 million was spent on health and population activities in Bangladesh. This was approximately equivalent to US$7.1 per capita or 3.1% of GDP. To gain a better understanding of the sector, however, we need to disaggregate these figures.

Sources of Funding

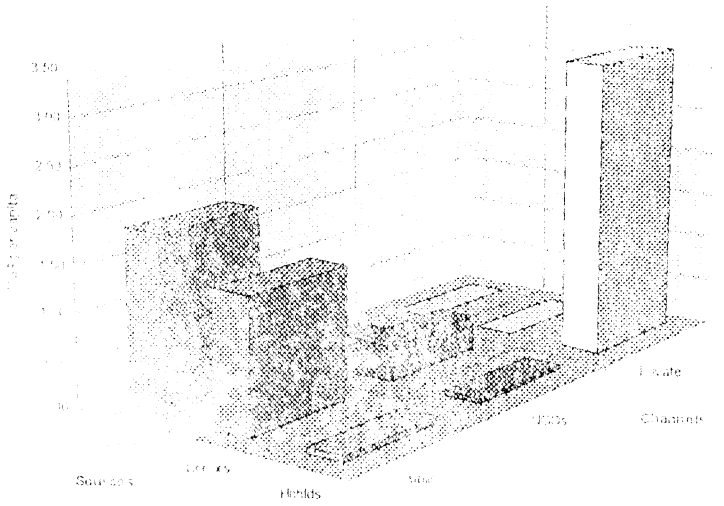
The majority of the funding of the health and population sector in Bangladesh came from *household* expenditure, as can be seen in Diagram 8. Indeed, household expenditure accounted for over 47% of the funding of the sector, or over US$ 400 million in 1994/95, as shown in Tables 4 and 7. This was approximately 1.5% of GDP, Table 6, and equated with an average per capita expenditure on health and population of almost US$ 3.40, Table 5.

Diagram 7: The Macro Flow of Funds in the Health and Population Sector, 1994/95, US$m



N.B. Rounding may cause some funding flows to appear inaccurate.

Diagram 8: Sources and Channels of Funds in the Health and Population Sector, 1994/95, US$ per capita



From the analysis in section F, it is clear that well over half of this expenditure, or US$ 240 million, was made by the richest quarter of the population. More was spent on health care for men than women, and urban dwellers tended to spend more per household than people living in rural areas. This was despite worse morbidity and mortality indicators for women and rural populations (BBS 1996).

The *GOB* was the next largest contributor to the sector, accounting for almost 27% of sector funds or just under US$ 230 million. (This did not take into account food and commodity aid which appears as part of the GOB Budget in the published expenditure data. Table 4 shows that food and commodity aid actually contributed US$ 40 million to the Government's Revenue and Development Budgets. If included in GOB funding, this would boost its share to 31% of the total.) GOB's 1994/95 contribution to the health and population sector was the equivalent of US$1.9 per capita, or about 0.8% of GDP.

The *donor* contribution to the health and population sector in 1994/95 was approximately US$ 220 million, or the equivalent of US$ 1.8 per capita. These figures should probably be refined in the light of information from the National Health Accounts Project on the size of the donor funding of NGOs. Nevertheless, in the meantime, donor funding appears to have accounted for 26% of total sectoral funding, approximately 0.8% of GDP.

Providers and End Uses

There is insufficient data to enable the funding flows to be traced in any ideal way. Hence, although it is possible to trace the funds going to different types of providers it is almost impossible to ascertain comprehensively the end uses. The largest provider of services, in terms of channelled expenditure, appears to have been the *public sector*, as shown by Diagram 9 and Table 4. (For our purposes the public sector is assumed to account for all GOB health and population infrastructure and projects funded by GOB, donors and households.) The public sector totalled almost US$ 430 million, around 48% of total sector expenditure.

Table 4: Flow of Funds - Total Expenditure, 1994/95 US$ million

	Sources of Funding						
Providers	GOB	Donors - Food and Commodity Aid	Donors - ADP Funding	Donors - Total	Households	NGOs	TOTAL
Public Sector	**225**	**40**	**135**	**174**	**7**		**407**
- Tertiary Hospital	31	5	2	8	1		40
- Secondary Hospital	30	5	5	10	1		42
- PHC	78	14	14	28	3		108
- FP/MCH	61	11	96	107	2		170
- Other	26	4	17	21	1		48
NGOs	**2**			**46**	**6**	**2**	**56**
Private for Profit					**391**		**391**
- Medicine					319		319
- Qualified					24		24
- Unqualified					48		48
GRAND TOTAL	**228**			**221**	**404**	**2**	**855**

Table 5: Flow of Funds - Expenditure Per Capita, 1994/95 US$

	Sources of Funding						
Providers	GOB	Donors - Food and Commodity Aid	Donors - ADP Funding	Donors - Total	Households	NGOs	TOTAL
Public Sector	**1.87**	**0.33**	**1.12**	**1.44**	**0.06**		**3.37**
- Tertiary Hospital	0.26	0.04	0.02	0.06	0.01		0.33
- Secondary Hospital	0.25	0.04	0.04	0.09	0.01		0.34
- PHC	0.64	0.11	0.12	0.23	0.02		0.90
- FP/MCH	0.50	0.09	0.80	0.89	0.02		1.41
- Other	0.21	0.04	0.14	0.18	0.01		0.40
NGOs	**0.02**			**0.38**	**0.05**	**0.02**	**0.47**
Private for Profit					**3.24**		**3.24**
- Medicine					2.64		2.64
- Qualified					0.20		0.20
- Unqualified					0.40		0.40
GRAND TOTAL	**1.88**			**1.83**	**3.35**	**0.02**	**7.08**

Table 6: Flow of Funds - Expenditure as Proportion (%) of GDP, 1994/95

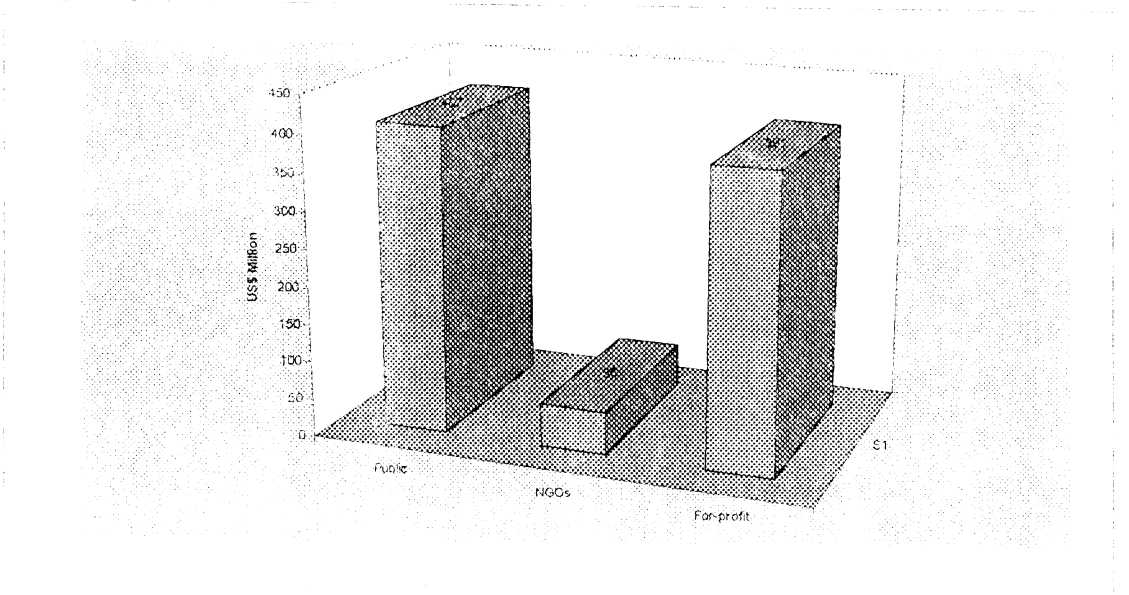
	Sources of Funding						
Providers	GOB	Donors - Food and Commodity Aid	Donors - ADP Funding	Donors - Total	Households	NGOs	**TOTAL**
Public Sector	**0.82**	**0.14**	**0.49**	**0.63**	**0.03**		**1.48**
- Tertiary Hospital	0.11	0.02	0.01	0.03	0.00		0.14
- Secondary Hospital	0.11	0.02	0.02	0.04	0.00		0.15
- PHC	0.28	0.05	0.05	0.10	0.01		0.39
- FP/MCH	0.22	0.04	0.35	0.39	0.01		0.62
- Other	0.09	0.02	0.06	0.08	0.00		0.17
NGOs	**0.01**			**0.17**	**0.02**	**0.01**	**0.20**
Private for Profit					**1.42**		**1.42**
- Medicine					1.15		1.16
- Qualified					0.09		0.09
- Unqualified					0.17		0.17
GRAND TOTAL	**0.83**			**0.80**	**1.47**		**3.11**

Table 7: Flow of Funds - Expenditure as Proportion of Total

	Sources of Funding						
Providers	GOB	Donors - Food and Commodity Aid	Donors - ADP Funding	Donors - Total	Households	NGOs	TOTAL
Public Sector	**26.4%**	**4.6%**	**15.8%**	**20.4%**	**0.9%**		47.6%
- Tertiary Hospital	3.6%	0.6%	0.3%	0.9%	0.1%		4.7%
- Secondary Hospital	3.6%	0.6%	0.6%	1.2%	0.1%		4.9%
- PHC	9.1%	1.6%	1.7%	3.3%	0.3%		12.6%
- FP/MCH	7.1%	1.2%	11.3%	12.5%	0.2%		19.9%
- Other	3.0%	0.5%	2.0%	2.5%	0.1%		5.6%
NGOs	**0.3%**			**5.4%**	**0.6%**	0.3%	**6.6%**
Private for Profit					**45.8%**		**45.8%**
- Medicine					37.4%		37.4%
- Qualified					2.8%		2.8%
- Unqualified					5.6%		5.6%
GRAND TOTAL	**26.6%**			**25.8%**	**47.3%**	**0.3%**	**100.0%**

Indeed, almost US$ 3.4 per capita of health care was funded through the public sector, equivalent to 1.5% of GDP. In contrast, the scale of the NGO sector appeared surprisingly small, as shown in Diagram 9. Indeed, NGOs hardly accounted for 6% of total sectoral expenditure which seems to make them an unlikely parallel structure to GOB. The private sector, about which little is known in Bangladesh, accounted for 46% of the sector funding. In 1994/95, households were spending, on average, over US$ 3.3 per capita on this type of health care. Yet it appears that only a small proportion of this was directed toward private qualified doctors.

Diagram 9: Resources allocated to different types of provider, US$ million, 1994/95



As noted above the data available do not reveal much about the uses of funds in the sector, to date. Nevertheless, it appears that the purchase of medicines, in the private sector, and of MCH and family planning services, in the public sector, dominated resource allocation in the sector as a whole.

An important question for the 5th PHP is how much expenditure could have been tapped, from the US$ 855 million total, to fund a basic package? This is not an easy question to answer and to do it we must make some assumptions. Public sector funding of PHC and MCH/FP in 1994/95 seems to have been around US$ 278 million. If we add to this 90% of the NGO funds derived from donors and households, and 10% of household expenditure on private sector activities, we arrive at a rather *crude* estimate of potential funding availability for a package, namely US$ 360 million, approximately US$ 3 per capita, or just over 40% of total sectoral expenditure. Whether this is an adequate estimation of potential funding is left open to question. The amount is certainly insufficient to fund a basic package without prioritisation.

Summary

- The total funding in 1994/95 of the health and population sector was approximately US$ 855 million, equivalent to US$ 7.1 per capita or 3.1% of GDP. Some crude calculations suggest that [illegible] spending on activities similar to those that might be covered in an essential package would be around US$ 3 per capita.

- The largest single source of funding in the sector was household expenditure, almost 47% of total funding or over US$ 400 million in 1994/95. GOB was the next largest contributor with US$ 230 million and donors spent just less with US$ 220 million, through various channels.

- The public sector accounts for around 48% of total sectoral funding, just over US$ 400 million. Private sector activities receive marginally less fudning, while NGO sector activities appear quite small, though often highly effective.

- The results appear to demonstrate that very little household expenditure is purchasing public sector services, and donors and the Government fund very few private sector services. To improve the impact of resource allocation **there may be scope to improve the effectiveness of public sector funding of services by making greater use of private sector providers.**

Section H: The Private Sector and Regulation

Introduction

Our flow of funds analysis implies that there exist two parallel structures in the Bangladesh health and population sector; the *public sector*, financed predominantly by GOB and donors, and the *private sector*, financed almost entirely by households. (The third delivery vehicle, NGOs, appears comparatively small in terms of expenditure, although essential for the delivery of family planning and MCH services). Given the private sector is almost as large as the public sector and, according to anecdote, growing fast, it is important for GOB to ensure that the needs of its population are being met by *both*, in the most efficient manner possible. Indeed, effective coordination of the two sectors may help GOB achieve maximum cost-effectiveness in its delivery of a basic package in Bangladesh. As we noted in Section C, the design and conduct of Government intervention must be infused with a knowledge of the size and scope of private sector operations.

At present, the private sector appears to have the confidence of the public, at least in terms of utilisation of lower level facilities. Nevertheless, it may be somewhat misleading to talk about the private sector as a homogeneous block. There is a world of difference between specialised care in Dhaka and traditional healing in rural areas. There is also a difference in terms of consumer perception and utilisation. Section F implied that income status and urbanisation go hand in hand with preference for allopathic treatment.

It is difficult to assess, therefore, the effectiveness of the private sector as a whole. The effectiveness of the purchase of health care from "quacks" or village doctors may not be terribly high, even if they are often the first point of contact for households. Nevertheless, the *profit motivation* of the private sector may help combat inefficiencies in the sector. Indeed, a strategy document for the forthcoming Fifth PHP (*ibid*), recognises that the private sector may be given greater responsibility in the provision of services.

The aim of this section is to investigate the *roles* of the private and public sector in the provision of health services. It will attempt to demonstrate that policies to increase the role of private sector provision, **must be accompanied by suitable regulation and incentives in order to achieve public sector objectives**. We will begin by examining the possible benefits of both the NGO and the private sector. The former is included to give readers a complete overview of service delivery vehicles but it is the latter on which our analysis concentrates. Following this, there is a discussion of the need for regulation and its required form in Bangladesh.

The Potential of the NGO and Private Sectors

NGOs

It is often believed that NGOs are more efficient than the public sector and provide a higher quality service (World Bank 1993:4). According to Streefland (1990), donors prefer to fund NGOs because they are "innovative" and good at meeting the needs of people at the "grass-roots" level. Yet, the evidence, reviewed by Gilson et al (1994), is inconclusive. The less bureaucratic nature of NGOs compared with Government, Gilson et al argue, does allow them to be more flexible, *but* it can also mean they lack management and planning capability. NGOs

may also focus on local needs at the expense of national priorities. Furthermore, unless they can become self-sustaining, they must rely on donor or Government funding and this questions the ability of NGOs to develop a long-term perspective. Gilson et al recommend that any expansion of the role of NGOs should be allowed cautiously, with suitable regulation and co-ordination by Government.

In Bangladesh, NGOs receive a relatively small proportion of total sectoral funds. Yet, this is not to undermine their value. They have an extremely important role to play in certain market niches, such as the delivery of family planning and other basic services. Indeed, the achievement of many health and population sector macro targets would be impossible without them.

The For-Profit Private Sector

The World Development Report in 1993 suggested that the private sector should be encouraged to provide more health care services because it is often more "technically efficient" (1993:4), and because competition will "improve quality and drive down costs" (1993:7). Is the private sector necessarily more efficient? Can and does it lead to lower production costs?

First it is important to question exactly how we wish to measure *efficiency*. The different objectives of the public and private sector must be taken into account. As we have seen the public sector may have a range of objectives from health status maximisation to equitable access to health care and welfare. In contrast, the private sector is often thought to be interested only in profits. If this is the case, we must be careful to note that we are not comparing like with like. To expect the public sector to behave like the private sector is to change its objectives, and vice versa.

The Need for Regulation

Naturally, the private sector will not behave in a way consistent with Government's efficiency and equity objectives. What can be expected from the private sector? It is argued that the incentive to make and increase profits encourages for-profit providers to be more efficient than public sector providers. In theory, profit-maximisation leads to lower costs and responsiveness to consumer demands. Yet this is not always the case in health care as the World Bank readily notes in WDR 1993:

> *"It is much less clear...whether competition among suppliers of health services always leads to greater efficiency. In fact, the contrary sometimes happens, especially when competition among private providers is combined with third party reimbursement of fees paid for services".*

Indeed, the market often fails to produce an optimal result in the health sector. Limited information about health care, benefits which are not restricted to the consumer and the possibilities for economies of scale can all mean that a market solution in health care is not an efficient solution.

What can Government do to correct such imbalances? The most appropriate type of intervention, according to Bennet et al (1994), will depend on

- the objectives of government,
- the nature of the problem,
- the capacity of the government for action.

With this in mind, what actions are already being taken by the GOB? How effective are they? What new steps could GOB take to regulate not only the formal private sector but also the vast number of informal providers at the village level?

Existing Regulations

Under an Ordinance passed in 1982 private medical facilities can be closed if they do not adhere to certain standards. The Ordinance stipulates, amongst other things: the number of required clinicians, the available area and equipment, and maximum prices. According to an article in The Independent (1996), the regulations are virtually ignored because the authorities do not have the capacity to enforce them.

The National Drugs Policy (NDP), also introduced in 1982, places a restriction on the type of drugs that can be supplied in Bangladesh, with the objective of controlling their quality and price. According to Chowdury (1995) the NDP was seen by many as a blueprint for drug policies in other developing countries. Furthermore, the NDP demonstrated the potential for regulation in the health care sector as a whole. Still, the continued effectiveness of the policy is now in doubt and donors view its revision as a high priority.(World Bank 1995:7)

The not-for-profit private sector is regulated by the 'NGO Affairs Bureau', a GOB agency. The Bureau keeps a register of all NGOs in Bangladesh, and approves all foreign funding of NGO projects. In assessing a NGO project, the project officer at the Bureau assesses, as far as possible, the feasibility of the project and the level of need for the project. Although no substantial study exists, anecdotal evidence suggests that geographical clusters of NGOs often exist, leaving other areas of the country sparsely served. This raises concerns about the optimal regulation of NGOs and the objectives and criteria employed for approval of NGO projects.

Types of Regulation

Bennet et al (1994) identify a number of key agents in the regulatory process, such as the State, professional organisations, consumers and consumer organisations. They argue that governments can use both *incentives* and *punishments* as regulatory mechanisms in a number of ways.

A government can regulate *quality* directly by stipulating minimum standards. The easiest way of doing this is by controlling the *quality of inputs*, for example by setting training standards for doctors and nurses. Alternatively the *quality of the process* can be regulated, for example, by setting:

required levels of skill-mix,

the use of certain pieces of equipment,

minimum hygiene standards.

Regulating the *quality of outputs* directly is less common, even in the 'established market economies', because of the high costs of information.

In order to regulate effectively the quality, or price, of health care directly a government will need to keep a register of all providers, monitor their quality and enforce the regulations by imposing financial penalties or revoking licences. Clearly *the costs of obtaining the necessary information would be high*. At present there is no effective standard-setting regulation in Bangladesh.(World Bank 1995) Still, a worthwhile starting point for GOB would be to have private sector activity mapped

As a large source of funding for health care, GOB can use its power as a consumer to ensure efficiency in contracted private sector firms. By purchasing services from providers who have low costs but provide high quality services, the GOB may boost efficiency within the GOB health care infrastructure. This will also stimulate the performance of other providers. Still, GOB resources would be required to acquire the necessary information to monitor progress and administer the contracts.

Governments can also delegate responsibility for controlling quality. In many countries *professional organisations* have the power to revoke the licence to practice from doctors that do not meet medical and ethical standards. Self-regulation by doctors has the advantage that they are the most knowledgeable about the effects of their treatments. Nevertheless, this effectively provides the professional organisation with a monopoly on the supply of labour.

Affecting the (im)balance of power between purchaser and supplier of health care may provide the GOB with a mechanism to affect the price and quality of health care. This may be achieved in a number of ways. First, the GOB could reduce the level of asymmetric information by improving the level of education and health awareness amongst the consumers. Given the low levels of literacy in Bangladesh, approximately 42% of adults (BBS 1996), improving the quality of general education, and health education, may offer the GOB a potential mechanism for improving the effectiveness of private health care, which is fairly sustainable.

Second, **the GOB could give purchasers greater power of redress by providing them with *consumer rights***. However, the few people with the resources to enforce these 'rights' are likely to be faced with higher medical bills as doctors become more 'defensive' in the type of care they provide.

Finally, community organisations are becoming increasingly important, particularly in countries participating in the Bamako Initiative.(World Bank 1993:159) In Bangladesh, the World Bank (1995:7) has argued, more community participation "should be a major aspect of future planning and strategy development....for ensuring that services are relevant to the needs of the clients". **Community organisations can reduce the problem of asymmetric information by facilitating the gathering and dissemination of information, and give individuals more power as consumers by combining their purchasing power**. The importance of a "client-focus" in the delivery of a basic package in Bangladesh should be encouraged from this perspective. Now, there are drawbacks to this approach. Consumers may have different perceptions of *need* from providers. Community empowerment will not stop

consumers demanding medically inappropriate treatment. Hence, empowerment must be accompanied by a long process of patient education.

The Constraints faced by the GOB

The GOB's current expenditure plans for the health and population sector already exceed projected future available revenue. In this light, the option of extending the role of the private sector, in an attempt to improve quality and efficiency, appears attractive. Still, the capacity of the GOB to co-ordinate, regulate and control health care programs, like many other developing countries, is limited. A document prepared by a working group for the 5th PHP uses this as a justification to argue for an expansion of the role of the private sector in the provision of services.(World Bank 1995)

Nevertheless, the World Health Organisation (WHO 1993:63) has argued, a diversification of the health sector makes a Government's task of planning and co-ordination more difficult. Still, it is unlikely that the private sector will meet GOB's efficiency and equity objectives, unless it is regulated and controlled. At the same time, GOB must find methods of regulation which are within its resources.

Conclusion

- The Flow of Funds study has highlighted the dual nature of funding of the health and population sectors. The public and private sectors are almost the same size, each being close to US$400 million, yet there is little coordination. GOB may well boost the efficiency of resource allocation if it can direct private sector activity in these areas.

- Although private sector firms can provide more efficient production of health care, their goals of profit maximisation and prestige are very different from the promotion of equity and health status maximisation outlined in public sector planning documents. Furthermore, the private sector often experiences "market failure" through incomplete information and joint consumption of goods. There is, therefore, an implicit need for GOB regulation.

- Nevertheless, the GOB faces constraints in regulation of the private sector due to the limited nature of public sector resources, both financial and physical. Perhaps community empowerment, the use of GOB incentive structures and the control of quality of inputs into the system are the most promising ways forward for effective GOB regulation of the private sector. Furthermore, improving the data available to consumers on standards might also help them make rational choices in the market.

Section I: Conclusions and Recommendations

The study has mapped out the funding flows in the health and population sectors in Bangladesh for the GOB financial year, 1994/95. Sources and channels of funding have been traced and, where possible, end uses have been analysed. The study has tried to relate these funding flows to existing and future priorities in the sector for the main players, GOB, donors and households. It has also suggested a number of ways to improve the allocation of resources and co-ordinating the work of the public and private sectors, the pillars of health and population activity in Bangladesh. It is apparent that demand in the *private sector* is largely uninformed and ineffective while in the *public sector* there is inadequate financing of running costs, leading to problems with quality of care. In turn, this causes under-utilisation at some levels.

It is hoped that the process of developing a dynamic system of National Health Accounts will build upon the initial work conducted here. It is possible to add significant value not only in terms of complete categorisation of end-uses of sector expenditure but also in applying output measures to sub-sectors and examining macro cost-effectiveness. Such initiatives will further help policy makers determine the optimal allocation of resources in Bangladesh to meet such objectives as equity of access to basic health care needs. They will also decrease the reliance of policy makers on potentially inappropriate international data and findings.

A brief summary of the main findings of the report is enclosed before we examine recommendations for policy makers.

Priority Setting in Health Care Financing

- The identification of objectives in a health and population sector is crucial to the process of resource allocation. Funding flows will often reveal actual priorities and should reflect stated ones.

- According to the 4th PHP and the preparations for both the National Health Strategy and a 5th PHP, GOB and consortium donors are agreed on the priorities of equity and health status maximisation within the sector. Recent documents in the preparation of 5th PHP marry the two objectives into a goal of equitable access to a basic health care package, using CEA as a tool for its achievement. Welfare maximisation, considered separately, is not included as an explicit criterion.

Government Expenditure

- GOB resource allocation appears broadly in line with stated objectives. The proportion of expenditure going to the areas identified as priorities, PHC and MCH/family planning, showed an overall increase over the first half of the 1990s. Nevertheless, inadequate funding of *recurrent* activities in the health care infrastructure may well be contributing to under-utilisation at certain levels. Indeed, the lack of maintenance, supplies and effective manpower may well undermine the effectiveness of GOB's investments in the sector.

Donor Expenditure

- Although GOB and the donor consortium have united objectives, as outlined in the 4th PHP, there are some differences in the pattern of funding. GOB allocated more funding to higher levels of the health care infrastructure while donors funded more population activities.

- Data on donor funding of NGOs are, at present, approximate and occasionally conflicting. Nevertheless, the bulk of the available evidence points to a lower estimate of the financial flows into NGOs than indicated by some official sources. Information from twelve key donors and the NGO Bureau imply the sector was not larger than US$ 50 million in 1994/95.

Household Expenditure

- Average out-of-pocket expenditure by individuals on health and population services was estimated to be around US$ 3.4 per capita in 1994/95. Such spending is highly biased toward the richest 25% of the population. Even ignoring the problematic effects of asset depletion and borrowing, the poorest quartile spent less than US$ 40 million on health and population services in the same year. There is little purchasing power or room for cost-recovery in the poorest three quarters of the population.

- Further analysis of household expenditure reveals that households spent more on health care for men than women, households in urban areas allocated a larger proportion of their expenditure to health and that allopathic care was bought for men and urban households more frequently than for women and rural households. It tended to be the case that those in the greatest need, women and rural dwellers, purchase the least *effective* health care.

- Given the small amount of cost-recovery from NGOs and GOB it appears that households spent almost 95% of their resources in private care. By implication much of this was curative, being used to purchase medicine. Given the limited contact with the formal health sector the effectiveness of such expenditure is highly questionable.

Macro Flow of Funds

- The total funding in 1994/95 of the health and population sector was approximately US$ 855 million, equivalent to US$ 7.1 per capita or 3.1% of GDP. Some crude calculations reveal that 1994/95 spending on activities similar to those that might be covered in an essential package was around US$ 3 per capita.

- The largest single source of funding in the sector was household expenditure, almost 47% of total funding or over US$ 400 million in 1994/95. GOB was the next largest contributor with US$ 230 million and donors spent just less, US$ 220 million, through various channels.

- The public sector accounts for around 48% of total sectoral funding, just over US$ 400 million. Private sector activities receive marginally less funding, while the NGO sector appears quite small and specialised, though often highly effective.

The Private Sector and Regulation

- The flow of funds study has highlighted the dual nature of delivery of the health and population services in Bangladesh. The public and private sectors are almost the same size, each being close to US$ 400 million, yet there is little co-ordination. Furthermore, very little household expenditure is purchasing public sector services, and donors and the Government fund very few private sector services. To improve resource allocation there is scope for GOB to make greater use of the private sector.

- Although private sector firms can sometimes provide health care more efficiently, their goals of *profit maximisation* and *prestige* are very different from the promotion of *equity* and *health status maximisation* outlined in public sector planning documents. Furthermore, the private sector often experiences "market failure" through incomplete information and joint consumption of goods. There is, therefore, an implicit need for GOB regulation.

- Nevertheless, the GOB faces constraints in regulation of the private sector due to the limited nature of public sector resources, both financial and physical. Perhaps community empowerment, the use of GOB incentive structures and the control of the quality of inputs into the system are the most promising ways forward for effective GOB regulation of the private sector. Furthermore, improving the data available to consumers on standards might also help them make rational choices in the market.

Recommendations

GOB Regulation at Minimum Cost

Despite resource constraints GOB has an important role in the co-ordination of the public and private sectors. In particular, GOB should pursue regulation activities which involve minimum cost. **Community empowerment**, accompanied by education, may be a cheap way of regulating private sector activities. The GOB might also consider offering financial incentives to private sector firms for their collaboration in the public sector alongside improving efficiency through budgetary reform. The **contracting out** of various services in hospitals and the development of different forms of **health insurance** are potential alternatives. Furthermore, the GOB should continue its work in **monitoring the quality of inputs** into the system. Both human resource development and quality assurance in essential drugs are important areas of activity.

Consumer Education

Given the ineffective nature of much household expenditure, it will be important to **educate the population on the relative worth of different types of health care**. This will boost the demand for formal sector services, whether in the public or private sector, and encourage non-formal private sector providers to upgrade their activities.

Under-utilisation and Financing of Facilities

Under-utilisation of existing facilities, particularly for in-patient services at Thana facilities is a key indication that some GOB services do not have the confidence of households. This can be partly remedied by determining the unit costs of running facilities well. **Such unit costs can then be translated into the Revenue Budget.** In addition, changing incentives within the public sector by altering the budget framework might also help increased efficiency from *existing resources*. Both GOB and donors have a responsibility to see that the running costs of their investments in health and population are adequately and efficiently financed.

Basic Package

Any adoption of a basic package, without substantial prioritisation of components, will require GOB to reallocate resources even more toward its stated objectives of PHC and MCH/FP activities. Given the gender biases in household expenditures, it may be particularly important to defend women's health interventions in any prioritisation of the basic package. Unless this is done the goal of equity of access to basic health care will not be reached.

User Fees and Equity

Expansion of user fees, albeit important for the funding of an essential package, will be difficult outside the richest 25% of the population, who seem to account for approximately 60% of total household expenditure on health and population services. Indeed, within the allopathic sector the distribution of expenditure is even more skewed toward the well-off. Targeting of the poor may be important but difficult and costly to pursue (Kawnine et al. 1995b). In its place, cost-recovery might have to go hand-in-hand with self-selection mechanisms. This involves making different market options available for rich and poor, on the basis of non-medical items. Profits are then pursued in the more expensive market option and are used to subsidise the cheaper option.

National Health Accounts and Accountability

The work of this flow of funds study needs to be taken further. There are some sizeable gaps in data which prevent important analysis for policy makers. Indeed, there are several areas on which a National Health Accounts project should focus.

1. **Types of health service bought** by the funding flows in the sector, are uncertain outside of the GOB sector. Consistent categorisation of the uses of all resources is required if meaningfully comparisons are to be made.

2. The NGO sector needs to be better documented. **Donors often have little confidence in their own data and are sometimes unwilling or even unable to specify funding flows to NGOs**. This hampers important analysis of the sector and hinders a better allocation of resources.

3. **It is essential that NHA collect time-series data to construct a dynamic picture of the sector**. This will help policy makers see the impact of their decisions and will avoid the problems of a *freeze-frame* analysis.

Section J: Selected Bibliography

1. Alba,M (1995) "Estimating a Translog Variable Cost Function to Explore the Relative Efficiency of Public Hospitals" Regional Conference on Health Sector Reform in Asia" 22-25 May, Asia Development Bank, Manila.

2. Bennett, S Dakpallah, G et al (1994) "Carrot and Stick: state mechanisms to influence private provider behaviour" Health Policy and Planning 9(1) 1-13.

3. Brenzel L (1993) "Selecting an Essential Package of Health Services Using Cost-Effectiveness Analysis: A manual for professionals in developing countries" Harvard University

4. BBS (1991) "Report on the Household Expenditure Survey 1988/89" Bangladesh Bureau of Statistics, Dhaka

5. ___ (1995a) "Household Expenditure Survey 1991/92" Bangladesh Bureau of Statistics, Dhaka.

6. ___ (1995b) "1994 Statistical Yearbook of Bangladesh" Bangladesh Bureau of Statistics, Dhaka.

7. ___ (1996) "Bangladesh Health and Demographic Survey: Summary Findings, 1994 and 1996" Bangladesh Bureau of Statistics, Dhaka.

8. BIDS (1988) "Bangladesh Health and Finance Expenditure Study, BIDS" Bangladesh Institute of Development Studies, Dhaka

9. Chowdury, Z (1995) "The Politics of Essential Drugs" Zed Books.

10. Donaldson, C Gerard, K (1993) "Economics of Health Care Financing" Macmillan.

11. ERD (1995) "Flow of External Resources into Bangladesh" Economic Relations Division, Ministry of Finance, Dhaka.

12. Gailbraith, JK (1958) "The Affluent Society"

13. Gilson, L Sen, PD et al (1994) "The potential of health sector non-Government organisation: policy options" Health Policy and Planning 9(1):14-24

14. HEU (1995a) "An Analysis of Recurrent Costs in GOB Health and Population Facilities" Health Economics Unit, MOHFW, Dhaka.

15. ___ (1995b) "A Public Expenditure Review of the Health and Population Sectors" Health Economics Unit, MOHFW, Dhaka.

16. ___ (1996a) " Balancing Future Resources and Expenditure in the GOB Health and Population Sectors" MOHFW Dhaka.

17. ____ (1996b) "User Fees, Self-Selection and the Poor in Bangladesh" Health Economics Unit, MOHFW, Dhaka.

18. ____ (1996c) "Mobilising Resources through Hospital User Fees in Bangladesh: A Report on Quality and Ability to Pay" Health Economics Unit, MOHFW, Dhaka.

19. Hammer, J Berman, P (1995) "Ends and Means in Public Health Policy in Developing Countries" Regional Conference on Health Sector Reform in Asia: 22-25 May, Asia Development Bank, Manila

20. Independent, The (1996) "Malpractice ails city clinics" 3 August 1996, Dhaka.

21. Masud, ZM (1993) "Community Financing" Sponsored by UNICEF, Dhaka.

22. McGreevey, W (1996) "Public Hospitals as Catastrophic Insurance: An Exchange of Views" Circular distributed by e-mail 19 June 1996.

23. NGO Bureau (1995) "NGO Directory Bangladesh 1994" NGO Affairs Bureau, Dhaka.

24. Nittayaramphong, S Tangcharoensathien, V (1994) "Thailand: private health care out of control?" Health Policy and Planning 9(1):31-40

25. Rannan-Eliya, RP (1996) "Sri-Lanka: Hospital Investments" In McGreevEy, W (1996) "Public Hospitals as Catastrophic Insurance: An Exchange of Views" Circular distributed by e-mail 19 June 1996.

26. Rannan-Eliya, RP Berman, P (1993) "National Health Accounts in Developing Countries: Improving the Foundation" Data for Decision Making, Harvard University

27. Streefland, P Chowdhury, M (1990) "The long-term role of national Non-Government development organisations in primary health care: lessons from Bangladesh" Health Policy and Planning 5(3):261-266.

28. Schwartz, JB (1996) "Essential Health Care in Bangladesh: Who Should Pay?" Paper presented to the Annual Conference of the Health Economics Unit, 11-13 August, Dhaka.

29. Unger, J-P Killingsworth, JR (1986) "Selective Primary Health Care: A Critical Review of Methods and Results" Social Science and Medicine, 22, 1001-1013

30. WHO (1993) "Evaluation of Recent Changes in the Financing Health Services" WHO Technical Paper

31. World Bank (1991) "Bangladesh Fourth Population and Health Project" World Bank, Dhaka.

32. _____ (1993) "World Development Report 1993: Investing in Health" Oxford University Press.

33. _____ (1995) "Approach to the Fifth Population and Health Project: Priorities, Objectives and Strategies" Working Group 1 Draft (September) Dhaka.

34. _____ (1996a) "Bangladesh Fourth Population and Health Project. IDA-Cofinanciers Supervision Mission", June, Dhaka.

35. _____ (1996b) "Bangladesh: Health and Population Sector Strategy. Discussion note on the main themes" World Bank, Dhaka.