

**Public Private Partnership in Service Delivery: An  
Evaluation of National Sanitation Program of Bangladesh**

**A Dissertation  
By**

**Mohammad Nazmul Abedin**

**BU ID-07272012**

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**INSTITUTE OF GOVERNANCE STUDIES  
BRAC University, Dhaka, Bangladesh**



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## Executive Summary

In view of the limited resources and inefficiencies of both the public and private sectors, partnerships can be a straightforward solution to address the growing public health problems including sanitation problem in Bangladesh. Partnership is required to exploit the strengths of all the sectors towards fulfilling the needs of the people, which is always challenging. This present research puts forward some lessons from the successful models and the challenging ones. It analyses the key factors contributing to the successes and failures of two selected models of partnerships in Sanitation sector in Bangladesh.

From the research findings, it is revealed that about 58 percent respondents of Manikgonj Sadar preferred public private partnerships for sanitation in their area, on the other hand in Sreepur about 45 percent respondents preferred govt. service for sanitation in their area. NGOs and CBOs have more or less same role in sanitation program in both the areas. Here it is mentioned that Manikgonj Sadar is considered as cent percent sanitation covered area in this research.

In Manikgonj about 80 percent respondents supported the active participation of public private partnerships for achieving 100 percent sanitation in their area. Only 8 percent supported govt. service to attain 100 percent sanitation and about 12 percent respondents thought that 100 percent sanitation is obtained through the participation of the NGOs and CBOs. It is also has been found from the study that in Manikgonj about 80 percent officials/personnel have given their opinion to achieve cent percent sanitation in their area is due to participation of public private partnerships, only 20 percent thought by other means. About 70 percent businessmen have given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 30 percent thought by other means. About 83.33 percent rural people have also given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 16.67 percent thought by other means.

It is evident that 100 percent sanitation in Sreepur Upazila has not been achieved due to the inactive participation of the public private partnership in the respective area and this PPPs inactive role is ranked 1<sup>st</sup> by about 50 percent the respondents (Officials/Personnel's). Lack of co-ordination of different public services is ranked 2<sup>nd</sup> and no participation of NGOs and CBOs is ranked 3<sup>rd</sup> by the respondents (Officials/Personnel's) for not achieving 100 percent sanitation in their areas. It is clear that about 53.33 percent rural people have given their opinion that in their area 100 percent sanitation is not achieved due to the inactive participation of the public private partnership. No participation of NGOs and CBOs is ranked 2<sup>nd</sup> and lack of co-ordination of different public services has been ranked 3<sup>rd</sup> by the respondents (rural people).

Making sanitation service accessible to all should not only be considered as one target of MDGs, but also a core responsibility of both national and local governments to satisfy the legitimate rights of all citizens. In this regard, governments are increasingly seeking professional expertise through varies forms of PPPs, which are expected to significantly contribute to achieving national objectives in affordable ways. However, successful PPPs require that all partners and stakeholders promote sustainable development through the formulation and implementation of specific policy measures.

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The Author  
Md. Namul Abedin



## Abbreviations

<b>ADB</b>	Asian Development Bank
<b>BOT</b>	Build Operate Transfer
<b>BOO</b>	Build Own and Operate
<b>BOT</b>	Build Operate and Transfer
<b>CBOs</b>	Community Based Organization
<b>CC</b>	City Corporation
<b>DPHE</b>	Department of Public Health Engineering
<b>DCC</b>	Dhaka City Corporation
<b>FDIs</b>	Foreign Direct Investments
<b>GoB</b>	Government of Bangladesh
<b>IDA</b>	International Development Agency
<b>LGED</b>	Local Government Engineering Department
<b>LGRD&amp;C</b>	Local Government and Rural Development and Commerce
<b>LGIs</b>	Local Government Institutions
<b>MLGRD&amp;C</b>	Ministry of Local Government and Rural Development and Commerce
<b>MDGs</b>	Millennium Development Goals
<b>NSS</b>	National Sanitation Strategy
<b>NGO</b>	Non-Government Organization
<b>PPPs</b>	Public Private Partnerships
<b>UN</b>	United Nation
<b>UNICEF</b>	United Nation Children Emergency Fund
<b>WHO</b>	World Health Organization
<b>WSS</b>	Water Supply and Sanitation
<b>WSSD</b>	Water Supply and Sanitation Department
<b>WASAs</b>	Water and Sewerage Authorities

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# Chapter 1

## Introduction

### 1.1 Introduction

Effective delivery of basic services is essential for the well-being of people. Adequate and effective delivery of public services is also central to achieving the Millennium Development Goals (MDGs). Thus, to ensure sustainable development and guarantee a progressive stride towards achieving many of the MGD goals, in particular, improved health and environmental sustainability, widespread access to water, sanitation and other basic public services are proving to be fundamental preconditions.

In general, the widespread dominance of public sector in the provision of public goods in developing countries like Bangladesh has been repeatedly blamed for the terrible state of these services. The monopolistic nature of the public sector market structure has therefore lead to the absence of competition, resulting in inefficiency and the lack of pricing mechanisms to determine consumer demands and to reflect service costs. Accordingly these “below-cost prices” have contributed to the low levels of government investment and lack of service expansion.

Against this backdrop, governments have been under continuous pressure to consider alternative ways of service provision. The past few years, therefore, have witnessed an upsurge in the commercialization of public services provision through building partnerships with the private sector. In general, the rationale behind involving the private sector is to avoid the potential political pitfalls of full privatization, utilize new technology and expertise, share risks and gain access to increased capital to improve operating efficiency, and, ultimately, make the sector more responsive to consumer needs. Progressively, government, private sector and civil society organizations (CSO) roles have become more clearly defined and public-private partnership (PPP) schemes have become more popular. The national sanitation program of Bangladesh is an example

of public-private partnership that has claimed success in achieving 100 percent sanitation coverage.

With over 1000 people per square kilometer, Bangladesh has one of the highest population densities in the world, where 50 percent of the population is categorized as poor and 20 percent as hardcore poor. In absolute numbers, therefore, about 71 million people are under the national poverty line (Ahmed, 2008). In spite of this serious challenge, the efforts to achieve nearly universal sanitation have become an example of global good practice. A comparable miracle is taking place in rural sanitation since the first South Asian Ministerial Conference on Sanitation (SACOSAN) in 2003, where the Government of Bangladesh (GOB) declared a goal to achieve universal rural sanitation by the year 2010.

Rural sanitation is likely to achieve the MDG goal to reduce “by half the proportion of people without sustainable access to safe drinking water and basic sanitation by the year 2015” even before the target date of 2015 (ADB, 1999). It is expected that by 2010 there will be universal access to sanitation in rural areas. Following the SACOSAN 2003 Ministerial Conference, GOB has launched a massive campaign and as of today, has achieved over 70 percent coverage through pit latrines (Ali, 2005). The rate of increase in access has been a remarkable 14 percent per year. Providing hygienic facilities and sustainable solutions in terms of maintenance and human waste removal is a priority that calls for partnerships among stakeholders, which involve government, public utilities, private sectors, NGOs, and the donor community. It is believed that, public private partnership is playing a vital role in achieving the target of 100 percent sanitation coverage.

Where there are many cases of failure in public service delivery in Bangladesh, the national sanitation program, by involving private sector participation and with their active partnership namely in the form of PPP (public private partnership) is showing dramatic improvement. As many Upazilas (administrative sub-district) of Bangladesh have declared 100 percent sanitation coverage, it is relevant and appropriate to study the

factors behind this success. This study therefore will try to look at the public services in sanitation that are being delivered by the private sector; and then examine reasons behind applying the PPP concept and evaluate the impact (change in the quantity and quality/improvement or non-improvement of service delivery) of using PPPs in the delivery of public services (sanitation service) and key issues for successful PPP- based on the experience of stakeholders in two selected Upazilas in Bangladesh

## **1.2 Objectives of the study**

Many Upazilas of Bangladesh have already declared themselves with 100 percent sanitation coverage. The objective of this study is to identify the success factors in achieving this target. This study will also examine whether Public Private Partnership (PPP) worked as success factor in those Upazilas. It will also try to reveal the causes behind unsuccessful cases of sanitation services delivery and this study will try to focus the following key research questions:

1. What are the factors that led to cent percent sanitation coverage in selected Upazilas?
2. Is the achievement of 100 percent sanitation coverage a result of effective Public Private Partnership (PPP) in service delivery?
3. What are the lessons and challenges of PPP in service delivery?

## **1.3 Justification of the study**

Though there have been a number of research undertaken on the strategy, procedures and successes of sanitation program, less attention has been given on the field of coordination between the implementing agencies working in field level especially at the Upazila level. Moreover, very little efforts have been carried out to study effective public service delivery through public private partnerships although most of the development works and public service deliveries at present are being delivered with active participation of private sectors, especially NGOs in the context of Bangladesh. An in-depth study on sanitation program of a particular Upazila can address such problems and therefore suggestions can be made to make the program more effective. By focusing

attention on identifying successful models that have already been implemented, suggestions can be made to improve public service delivery and to work together in a coordinated manner to scale up such approaches with greater public private partnerships.

## 1.4 Methodology

The study will use both primary and secondary data for analysis. There are a good number of literature on public private partnerships and also on the current national sanitation program of Bangladesh. Secondary data will be collected from these sources. To collect primary data, a questionnaire was developed to conduct a survey on two selected Upazilas one of which has declared 100 percent sanitation coverage. The two Upazilas are Sadar Upazila of Manikgonj District and Sreepur Upazila of Gazipur District.. Manikgonj Sadar achieved 100 percent sanitation, whereas Sreepur is yet to achieve that goal. The sample size was 50 respondents in the Upazila with cent percent sanitation coverage and 40 respondents in the less successful Upazila selected for this study. The questionnaire contained questions on performance of running/ completed sanitation programs, views of concerned government/NGO officials/private sector personnel. Attempts has been made to identify the preparedness of public officials to accept NGO and private sector as partner in service delivery.

Questionnaire survey has been conducted for exploring the general views of the people to identify the reasons behind in achieving cent percent sanitation or not achieving such in the selected areas, the factors that led to cent percent sanitation coverage in selected Upazilas, 100 percent sanitation coverage a result of effective Public Private Partnership (PPP) and the opportunities and challenges of PPP in service delivery.

Since the important stakeholders are the service receivers or the hardcore poor rural people. So a wide range of consultations will be needed to gather views and opinions from these groups. To fulfill such needs, formal and informal consultations and interviews will be carried out.

## **1.5 Organization of the paper**

This study explores the potentials of private sector participation in service delivery, focused on the provision of sanitation service of Bangladesh. Chapter 1 describes objectives of the study, its scope, limitations and methodology. Chapter 2 outlines the challenges, opportunities and options for public private partnerships (PPPs) and attributes and criteria of better service delivery by reviewing existing literature on PPP and sanitation programs of Bangladesh. Chapter 3 discusses about the institutional and geographical location of the study areas. Chapter 4 focuses on present state and strategies taken by the Government of Bangladesh in achieving sanitation coverage. Chapter 5 narrates the findings of field data collected from Sreepur Upazila of Gazipur District and Sadar Upazila of Manikgonj District. This Chapter also analyses the results, provides summarization of the study. The sixth and last chapter draws conclusions and comes up with policy recommendations for the way forward.

## **1.6 Limitations of the study**

The limitations of this study include limited information, short time frame and limited availability of funds. Since there is such same study in this regard and hence it is difficult to correlate the findings of this study. Due to time constraints, primary data has been collected only by interviewing 50 respondents from the successful Upazila which achieved 100 percent sanitation and only 40 respondents in unsuccessful Upazila. Limited funds were also a problem to correspond and communicate regularly with the organizational officials and personnel and also to visit the study area repeatedly.



# Chapter 2

## Conceptual and Theoretical Issues

### 2.1 Sanitation

Sanitation is the hygienic means of preventing human contact from the hazards of wastes to promote health. Hazards can be either physical, microbiological, biological or chemical agents of disease. Wastes that can cause health problems are human and animal faeces, solid wastes, domestic wastewater (sewage, urine, sullage, and greywater), industrial wastes, and agricultural wastes. Hygienic means of prevention can be by using engineering solutions (e.g. sewerage and wastewater treatment), simple technologies (e.g. latrines, septic tanks), or even by personal hygiene practices (e.g. simple hand washing with soap).

The term "**sanitation**" can be applied to a specific aspect, concept, location or strategy, such as:

**Basic sanitation** - refers to the management of human faeces at the household level. This terminology is the indicator used to describe the target of the Millennium Development Goals on sanitation.

**On-site sanitation** - the collection and treatment of waste is done where it is deposited. Examples are the use of pit latrines, septic tanks, and Inhofe tanks.

**Food sanitation** - refers to the hygienic measures for ensuring food safety.

**Environmental sanitation** - the control of environmental factors that form links in disease transmission. Subsets of this category are solid waste management, water and wastewater treatment, industrial waste treatment and noise and pollution control.

**Ecological sanitation** - a concept and an approach of recycling to nature the nutrients from human and animal wastes (WHO and UNICEF -2000).

## 2.2 Sanitation and public health

The importance of waste isolation lies in an effort to prevent water and sanitation related diseases, which afflicts both developed countries as well as developing countries in differing degrees. It is estimated that up to 5 million people die each year from preventable water-borne disease, as a result of inadequate sanitation and hygiene practices (Clarke, *et al.*, 2004).

## 2.3 Global access to improved sanitation

The Joint Monitoring Program for water and sanitation of WHO and UNICEF has defined improved sanitation as

- connection to a public sewer
- connection to a septic system
- pour-flush latrine
- simple pit latrine
- ventilated improved pit latrine

According to that definition, 59 percent of the world population had access to improved sanitation in 2004. Only slightly more than half of them or 31 percent of the world population lived in houses connected to a sewer. Overall, 2.6 billion people lacked access to improved sanitation and thus had to resort to open defecation or other unsanitary forms of defecation, such as public latrines or open pit latrines. This outcome presents substantial public health risks as the waste could contaminate drinking water and cause life threatening forms of diarrhea to infants (Blokland *et al.*, 1999). In developed countries, where less than 20 percent of the world population lives, 99 percent of the population has access to improved sanitation and 81 percent were connected to sewers (Zouggari, 2003).

## 2.4 Sanitation in the developing world

The United Nations Millennium Development Goals (MDGs) include a target to reduce by half the proportion of people without access to basic sanitation by 2015. In December 2006, the United Nations General Assembly declared 2008 'The International Year of Sanitation', in recognition of the poor progress has been made towards the MDGs sanitation target. The year aims to develop awareness and action to meet the target. Particular concerns are:

- Removing the stigma around sanitation, so that the importance of sanitation can be more easily and publicly discussed.
- Highlighting the poverty reduction, health and other benefits that flow from better hygiene, household sanitation arrangements and wastewater treatment.

Research from the Overseas Development Institute suggests that sanitation and hygiene promotion needs to be better 'mainstreamed' in development, if the MDG on sanitation is to be met. At present, promotion of sanitation and hygiene is mainly carried out through water institutions. The research argues that there are, in fact, many institutions that should carry out activities to develop better sanitation and hygiene in developing countries. For example, educational institutions can teach on hygiene, and health institutions can dedicate resources to preventative works (to avoid, for example, outbreaks of cholera).

## 2.5 On Better Service Delivery

The concept of better service delivery in the context of this paper is taken to mean an increase in both the quantity and quality of services that are delivered (provided) as a result of application of the concept of PPPs. The increase is mainly captured by increased satisfaction on part of the customers to whom the services are provided. This is

necessarily a comparative issue, where one looks at the state of affairs in service delivery before – and after application of PPPs.

Methodologically however, it may be difficult to entirely attribute the increased or decreased satisfaction in service delivery to the application of PPP. This is because change in satisfaction in service delivery may depend on many inter-linked aspects, PPP being one of them.

Where as it may be difficult to entirely attribute change in satisfaction in service delivery, it is possible however, to explain some observed changes in service delivery in the context of change in the mode of delivery – from purely public to PPPs in the context of this paper.

The condition of public service provisions and availability in Bangladesh is generally poor. Services provided are in most cases of inferior quantity and quality compared to those in more developed parts of the world. Where some services infrastructure is in place, their maintenance and repair is inadequate.

Effective and efficient infrastructure and services provision are important in delivering major benefits in economic growth, poverty alleviation, environmental sustainability and sustainable development. The services include water, sanitation, waste management, transport infrastructure, health services etc. All these are critical in meeting the needs of general people. Better service delivery is crucial for sustainable growth, development and poverty reduction. It increases people's standards of living and contributes to sustainable development.

Public sector provision of these services (in this context – delivery of sanitation services) however has proved to be inadequate and unsustainable due to, *inter-alia*, the nature of the public sector. Until very recently the sector has been typically characterized by inefficiency and lack of effectiveness, leading to poor performance. This in turn can be attributed to many closely inter-linked and self-reinforcing characteristics of the sector like political interference; unclear objectives; limited operational autonomy; inadequate

managerial skills *vis a vis* technical, human, conceptual and design skills; inadequate accountability and transparency; heavy and cumbersome bureaucracy; poor workers' morale; inappropriate economic settings; inadequate capital and lack of appreciation of the free inter-play of the market forces of supply and demand.

Such a sector therefore is inadequate in the whole exercise of effectively, efficiently and sustainably producing, rendering and improving the needed quantity and quality of goods and services. The private sector therefore can be seen as the next best and more sustainable alternative.

In the context of production and distribution of goods and services generally, the private sector is assumed to be more effective and efficient; it appreciates and embraces more the market forces of supply and demand; is less bureaucratic; more dynamic and vibrant; is the current predominant global ideology and a viable engine of growth and sustainable development. The sector however is first and foremost profit motivated. It would not embark in producing and distributing goods and services where there is no direct economic/pecuniary profitability. For example, the sector will not invest in some services and infrastructure, however important for the community they are perceived to be, if the net pecuniary gain is not positive. There will therefore be market failure in the production and distribution of such services.

The private sector in most of the developing countries in general and Bangladesh in particular is still in its infancy. On top of the infancy of the private sector in the region, the sector is relatively very small in size and capital base, especially so for the indigenous, as opposed to the foreign (in form of Foreign Direct Investments – FDIs) private sector. The former is likely to lack adequate experience, skills, knowledge and exposures needed to provide and expand the quantities and qualities of goods and services needed in a sustainable manner.

## 2.6 What is special about water and sanitation?

In many ways decisions about how to involve the private sector in water and sanitation resemble decisions about privatization in any other utility sector. But water and sanitation have special features that governments must take into account in choosing and designing a contract and in designing a supporting policy framework, if private sector participation is to succeed:

- Systems for allocating scarce raw water resources among alternative uses—urban consumption, irrigation, industry—are often underdeveloped or incompatible with efficient use of these resources.
- Water and sanitation systems are characterized by a high degree of "natural" monopoly.
- Water is essential to life, and access to it needs to be ensured for all, with special attention to the poor.
- Water and sanitation are naturally well suited to local management, and in many countries responsibility for service provision is decentralized to the provincial or municipal level.
- Broad access to water and sanitation yields important public health and environmental benefits.
- Water and sanitation are critical to economic and urban development.
- Many water and sanitation system assets are buried underground, so that obtaining accurate information about them is costly.

None of these issues is a barrier to private sector participation—all arise under both public and private provision. But governments often consistently confront these issues only when they begin to contemplate private sector involvement in water and sanitation. The success of a private sector arrangement will depend in large part on the quality of the policy framework that the government builds in response to these issues. Failure to adequately address them will increase the risk that the government will be unable to find a partner for its preferred form of private sector participation or that a private sector arrangement will fall short of the government's broad policy objectives.

One option in facing the challenges above is to enhance the role of both the public and private sectors in owning, financing and management/operation of the production and distribution of goods and services. Consequently, Private Public Partnerships (PPPs) is, and should increasingly be viewed as a mechanism to provide state functions and goods and services like sanitation on a cost effective and sustainable basis.

Under PPPs, the public sector is publicly accountable and responsible for ensuring that the needs of different sections of the population are treated equitably. The public sector has the responsibility to ensure that any contract awarded is actually the best option to reach optimum value for tax payers' money. They must make sure that they do not create a private monopoly situation. The private sector is responsible to its clients, shareholders, and owners.

## **2.7 Public private partnerships (PPPs)**

“Public private partnership” (or “PPP”) is now a very fashionable concept in discourse about public sector management. The term partnership is now a dominant slogan in the arena of public sector reform, arguably capturing that status from privatization which held similar dominance through the 1980s and 1990s. As privatization captured the minds of so many would be reformers over those decades and produced its own huge literature, so, it would seem, partnership especially in the form of public private partnership (or PPP) is about to do the same.

A travel through recent numbers of Journals of Public Administration reveals both the frequency of references to partnership and the variety of senses in which they are used. In a useful exploration Ryan notes that “the language of contestability and competition” is being replaced in many liberal democracies throughout the world with “the language of public private partnerships, cooperation and relationships”, with “new governance structures associated with ‘joined-up’ government (and) holistic

government’’ assuming prominence in efforts to improve service delivery (Ryan, 2001: 104).

PPPs are defined as:

*“the combination of a public need with private capability and resources to create a market opportunity through which the public need is met and a profit is made.”* (Heilman *at el.*, 1992).

The contractual arrangements range from service contracts, management contracts, leases, operations and maintenance concessions, capital investments to divestiture and asset ownership, through which variable levels of partnership are established to improve levels of efficiency, effectiveness, responsiveness and adequacy of public services. These collaborations can be with small-scale independent providers, nongovernmental organizations (NGOs) or the private sector. In most cases, the arrangements are service or sector specific.

**Table 1: Allocation of key responsibilities under the various options for private sector participation**

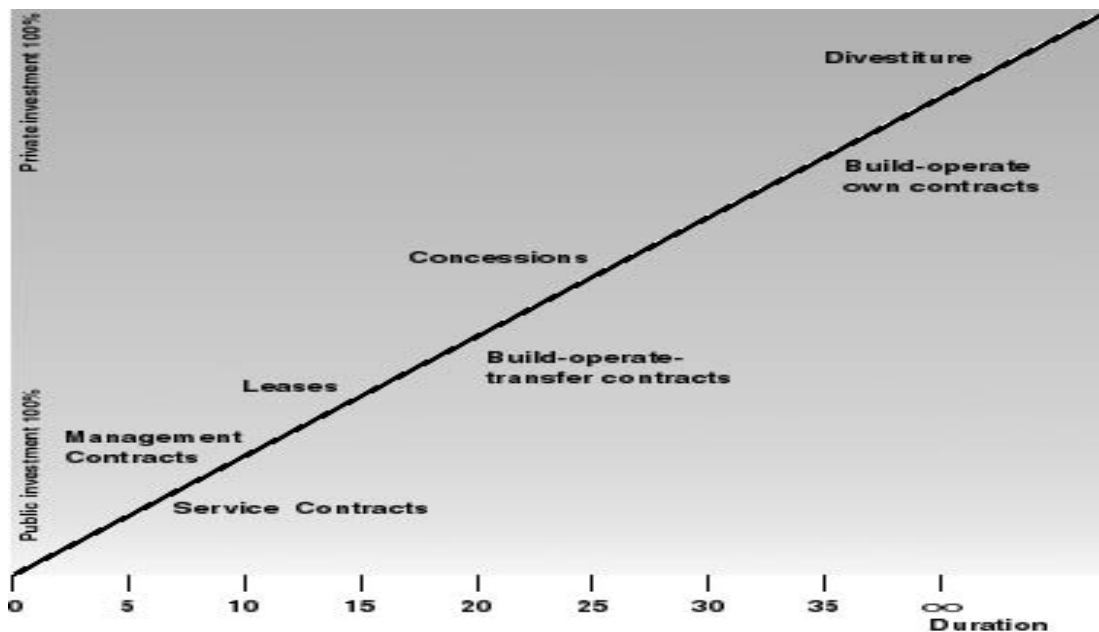
Option	Asset ownership	Operations and maintenance	Capital investment	Commercial risk	Duration
Service contract	Public	Public and private	Public	Public	1-2 years
Management contract	Public	Private	Public	Public	3-5 years
Lease	Public	Private	Public	Shared	8-15 years
Concession	Public	Private	Private	Private	25-30 years
SOT/BOO	Private and public	Private	Private	Private	20-30 years
Divestiture	Private or private and public	Private	Private	Private	Indefinite (may be limited by license)

*Source: World Bank, 1997. "Toolkits for Private Participation in Water and Sanitation".*



The options for private sector participation can be ranged along a spectrum. At one end are those in which the government retains full responsibility for operations, maintenance, capital investment, financing, and commercial risk—at the other, those in which the private sector takes on much of this responsibility (See figure below). But even where the private sector takes on full responsibility for operations and financing, as in concessions and asset sales, it does so within a framework created by the government. The most important parts of this framework are regulatory arrangements to protect consumers from monopolistic pricing and enforce health and environmental standards, and subsidy regimes to ensure access to services for the disadvantaged.

### The range of options



**Figure 1: Increasing level of delegation, risk, irreversibility**

The main options for private sector participation can be clearly distinguished by how they allocate responsibility for such functions as asset ownership and capital investment between the public and private sectors (Table 1). But in practice private sector arrangements are often hybrids of these models. For example, leases often pass some responsibility for small-scale investment to the private sector, and management contracts may have revenue-sharing provisions that make them a little like leases. Options might

also be used in combination for example; a build-operate-transfer (BOT) contract for bulk water supply might be combined with a management or lease contract for operating the distribution system.

According to a recent study from the South African Institute for International Affairs, in cases where partnerships have been able to best deliver desired outcomes, "...thorough planning, good communication, strong commitment from both parties and effective monitoring, regulation and enforcement by the government" was present. Where there has been a lack of thorough planning, PPPs in the water sector have not had much of the desired results in Africa. According to Ogunbiyi (2004), several schemes have had a "negative impact on the poorest of the poor by restricting their access to clean supplies due to high tariffs". The same author further asserts that PPP schemes involving management contracts, where the combination of public finance and private management of technical and commercial operations has been applied, could be the best type of contractual arrangement for water supply and sanitation in Africa.

**Public Private Partnership (PPP)** is, conceptually, collaboration between public and rivatesector organizations in public service delivery. (Commonwealth, 2003; Sohail, 2003; Buse and Walt, 2002; and Nkya, 2000).

According to Gildman et al (1995: viii), four groups of actors are relevant in PPPs. These are: the Government; Non Governmental Organizations (NGOs), Community Based Organizations (CBOs); and the private sector.

Gildman et al (ibid: ix) provides various PPPs management systems and techniques.

These are:

(i) **Contracting Out**: This is the placing of a contract by a public agency to an external private company.

(ii) **Franchising/Concession**: A private partnership takes over responsibility for

operating a service and collecting charges and possibly for funding new investments in fixed assets.

(iii) **Affermage:** Public authority controls construction and owns the fixed assets but contracts out operations, maintenance and collecting service charges.

(iv) **Leasing:** Making use of equipment/assets without purchasing but paying a lease.

(v) **Privatization:** Public service is entirely sold to a private partner.

(vi) **Management contract:** Private organization takes over responsibility for managing a service to specified standard by using staff, equipment etc, of public authority.

(vii) **Build Own and Operate (BOO):** Partnership between public and private sectors whereby the private firm may build, own and operate the asset/service.

(viii) **Build Operate and Transfer (BOT):** Same as BOO but the asset/service will be transferred to the public sector after a period of time.

(ix) **Management Buyout (MBO):** The management of well run internal functions negotiates the purchase of that function and becomes a private venture.

(x) **Co-operatives:** Self-governing voluntary organizations designed to serve the interest of their members, working in partnership with public authorities.

The most commonly practiced form of PPP is contracting out (Gildman: *ibid*). According to Sohail *et al* (2003) there is no strict PPPs classification that can be made, because partnership classification depends on the type of services, the nature and strengths of the partners and the objectives of the PPPs. According to North, (1990); Nkya, (2000); and Sohail, *et al* (2003), partnerships are basically institutional arrangements which constitute rules defining the relationships that govern the

partnerships, roles, responsibilities and accountability mechanisms (formal or implied). The overall aim of PPP is to meet public needs, which would not have been realized without joint efforts.

Through PPPs, *inter-alia*, the public sector will be able to maintain partial ownership and management of services, avoid accusations of “whole sale” transfer of service delivery to the private sector and at the same time be effective in its role of political accountability to its constituents.

## **2.8 What are the benefits of PPPs for government?**

### **PPPs provide an opportunity to:**

**Improve service delivery.** By allowing both sectors to do what they do best. Government’s core business is to set policy and serve the public. It is better positioned to do that when the private sector takes responsibility for non-core functions such as operating and maintaining buildings.

**Improve cost-effectiveness.** By taking advantage of private sector innovation, experience and flexibility, PPPs can often deliver services more cost-effectively than traditional approaches. The resulting savings can then be used to fund other needed services.

**Increase investment in public infrastructure.** Investments in hospitals, schools, highways and other provincial assets have traditionally been funded by the province and, in many cases, have added to levels of overall debt. PPPs can reduce government’s capital costs, helping to bridge the gap between the need for infrastructure and the province's financial capacity.

**Reduce public sector risk.** By transferring to the private partner those risks that can be better managed by the private partner. For example, a company that specializes in operating buildings may be better positioned than the government to manage risks associated with the changing demands of commercial real estate.

**Deliver capital projects faster.** Making use of the private partner's increased flexibility and access to resources.

**Improve budget certainty.** Transferring risk to the private sector can reduce the potential for government cost overruns from unforeseen circumstances during project development or service delivery. Services are provided at a predictable cost, as set out in contract agreements.

**Make better use of assets.** Private sector partners are motivated to use facilities fully, and to make the most of commercial opportunities to maximize returns on their investments. This can result in higher levels of service, greater accessibility, and reduced occupancy costs for the public sector.

## **2.9 What are the benefits of PPPs for the private sector?**

PPPs give the private sector access to secure, long-term investment opportunities. Private partners can generate business with the relative certainty and security of a government contract. Payment is provided through a contracted fee for service or through the collection of user fees and the revenue stream may be secure for as long as 50 years or more.

Private sector partners can profit from PPPs by achieving efficiencies, based on their managerial, technical, and financial and innovation capabilities. They can also expand their PPP capacity and expertise or their expertise in a particular sector which can then be leveraged to create additional business opportunities. For example, the company

can market its experience in other jurisdictions, once it has established a track record of working successfully with the public sector.

## **2.10 What are the characteristics of a viable PPP project?**

Proceeding with a PPP may be most appropriate when:

- There is a significant opportunity for private sector innovation in design, construction, service delivery, or use of an asset;
- Clearly definable and measurable output specifications can be established suitable for payment on a services delivered basis;
- An opportunity exists for the private sector partner to generate non-government streams of revenue, to help offset public sector costs;
- Some risks can be transferred to the private sector;
- Projects of a similar nature have been successfully developed using a similar method; and,
- The private sector has sufficient PPP capacity (expertise and availability) to successfully deliver project objectives.

## **2.11 What is the bottom line?**

PPPs are relatively new to developing country like Bangladesh but experiences in many countries clearly shows that these arrangements – if managed properly – can have significant benefits for both the public and private sectors. Government can reduce the costs and risks borne by taxpayers; which the private sector can generate business opportunities; and the public can receive better or more accessible services.

A series of studies carried out by the author in South Africa beginning in 1998 as well as those conducted by the Community Development Program of the United Nations in five countries of Africa, Latin America, and Asia prior to 1998 reveal serious

discrepancies between the theory propounding partnerships as a third world panacea and their consequences in actuality. In the context of the third world's wide socioeconomic gaps and decentralizing states, where central governments often have neither the will nor the ability to intervene effectively, PPPs are free to operate as the "Trojan Horses" of development. Private sector firms approach local governments and their impoverished communities with the message of power sharing, but once the process is in motion the interests of the community are often overwhelmed by those of the most powerful member of the partnership—the private sector firms.

From the theoretical perspective discussed above, it is understood that there are number of ways to involve private sector in public service delivery. Most of them are context specific and betterment of service delivery depends on successful decision making by the part of the government in choosing the options. Decisions taken by the government of Bangladesh to involve private sector in national sanitation program needs to be examined in light of the theoretical context discussed above. Before examining the theoretical application, the present state of sanitation in Bangladesh will be discussed in next chapter.

## **2.12 General challenges in application of PPPs**

Based on the general literature review, the survey of the seven LGAs in Tanzania and the in depth case study of Morogoro municipal council, there are a number of general challenges that are likely to be encountered by stakeholders in the efforts to apply the PPP concept in delivering public services, especially developing countries. Some of these challenges are identified and discussed in the Tanzanian context in what follows.

### **2.12.1 Newness of the PPP Concept**

As indicated in the literature review in this paper, the PPPs concept is still new and in its relative infancy stage of development in Tanzania. This brings a number of

challenges when it comes to the use of the concept. Challenges include proper understanding of the concept and its operation by those in various positions in the public and private sector; lack of the needed support, commitment and endorsement by various stakeholders in a PPP arrangement, partly as a result lack of the needed readiness to change and depart from the orthodox ways of doing things. All these challenges may lead to opposition in the use of the concept. Where it is applied it may be wrongly applied hence failures.

### **2.12.2 Private Sector Related Problems**

There are some characteristics of the private sector in Tanzania that pose some challenges in the application of the PPP concept. These include: the infancy of the sector. The sector is still taking shape in Tanzania, given the socialist past of the country that dominated up to mid 1980s. Private sector mentality and philosophy in Tanzania is still in its early stages of development. The needed aggressiveness, dynamics and vibrancy in the sector is still limited and non-optimal. The socialist, public sector dominated economic philosophy is still lingering in some people's minds. These include people in some key policy and decision making and implementation positions.

Another issue is the domination of the informal sector in the private sector in Tanzania. Informal sector dominates the private sector in Tanzania. Most economic activities in Tanzania (arguably up to 60%) take place in the informal sector where businesses are not legally recognized due to lack of registration for various reasons. (See Ngowi: 2005). As a result of this, it may become a challenge for the public sector to find qualified private sector partners to enter into a PPP arrangements especially where that private partner has to be legally recognized for, *inter-alia*, contractual purposes. (See some of the conditions that have to be fulfilled before entering PPP in the cases above).

Due to these and other private sector characteristics therefore, it may be difficulty to properly apply the PPPs concept in Tanzania. It becomes a challenge for example, to get the needed quantity and quality of private sector service providers in various sectors



and geographical regions, especially in the relatively remote, rural and underdeveloped parts of Tanzania.

### **2.12.3 Public Sector Related Problems**

The nature of the public sector in Tanzania poses some challenges in proper application of the PPPs concept for sustainable development. The sector is typically characterized by bureaucracy; inefficiency and ineffectiveness; lack of incentives, creativity, dynamism and vibrancy; generally slow in response and corrupt. This is a challenge for this sector to work perfectly with a private sector whose characteristics are, generally, the opposite of those of the public sector.

Among the typical examples of areas where there is a challenge for the two sectors to work together smoothly in a PPP arrangement in Tanzania, is in the slow speed of decision making and implementation in the public sector. A private sector partner may submit a proposal for a PPP arrangement (or respond to a call for one from the public sector), but the receipt of the proposal is not acknowledged by the public sector and it takes extra long time to reach key decisions on the proposed PPP arrangement due to the bureaucratic nature of the public sector. It takes extra longer time for contracts to be signed and payments to be made in the public than in the private sector. This is a disincentive for those in the private sector that would like to enter into PPP arrangements with the public sector, hence a challenge.

### **2.12.4 Capacity Issues**

Another challenge is the capacity of both the private and public sectors to properly operate and manage a PPP arrangement. Generally, there is inadequate capacity especially in the private sector – to properly participate in a PPP arrangement. Due to the nature of the private sector in Tanzania it is likely that there will be lack of internal capacities in issues like contract knowledge, contract formation, negotiation and management in the context of PPPs. Due to the lack of this specific capacity, the private

sector may need to hire legal expertise which adds to its transaction costs in entering into a PPP arrangement with the public sector. Another aspect is the general inadequacy of the needed funds, knowledge, experience and equipment by the private sector to implement a PPP arrangement. The majority in the private sector in

Tanzania is likely to be lacking the above capacities. As seen in the various cases of application of PPPs in Tanzania above, there are a number of conditions that the prospective private sector partners are supposed to fulfill before entering into a partnership arrangement. These include possession of appropriate amount of money, knowledge, equipment and experience. Some private firms may be having these, but due to the huge informality of the sector, these may be undocumented. Due to the nature of the private sector in Tanzania, it may be difficult to prove and/or verify that certain equipment (say a vehicle, tractor) belongs to a firm as these are normally registered in individuals' names but used for business purposes.

These and other similar challenges therefore make it difficult to properly apply the PPPs concept in Tanzania. It becomes a challenge for example, to get quality service providers that can adhere to standards and terms of reference in service provision.

# Chapter 3

## Overview of Study Areas

### 3.1 Study areas

The choice of functional areas was based on the author's observation of some PPP elements in those areas. The respondents were chosen randomly at the study areas. The target was to interview a total of ninety (50+40=90) respondents, under the assumption that the number is sufficient to give a general picture of the situation under scrutiny in the specific study area.

### 3.2 Selection of the study areas

#### 3.2.1 Sreepur Upazila

**Sreepur Upazila** (GAZIPUR district) with an area of 465.24 sq km, is bounded by BHALUKA and GAFFARGAON Upazilas on the north, GAZIPUR SADAR Upazila on the south, KAPASIA upazila on the east, KALIAKAIR and SAKHIPUR upazilas on the west. Main rivers are Shitalakshya, Banar, Parulia, Kawraid, Dhaor.

*Sreepur* (Town) consists of one mouza. The area of the town is 14.61 sq km. It has a population of 16766; male 52.86 percent, female 47.14 percent; density of population is 1148 per sq km. Literacy rate among the town people is 41.7 percent. It has one *dakbunglow*<sup>1</sup>.

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<sup>1</sup> Government Rest House



**Figure 2: Showing Sreepur Upazila (GAZIPUR district)**

*Administration* Sreepur thana was turned into an Upazila in 1984. It consists of 9 union parishads, 81 mouzas and 186 villages.

*Archaeological heritage* Rajbari (residence) of the Chandal Rajas at Chinashukhania (c. Vedic period).

*Historical events* There is an opinion that Sreepur was named after Raja Sreepal. It is said that the local Bhuiyans fought at Karnapur to resist the Mughal advancement. Possibly Karnapur Fort and the adjacent tank bear witness to that incidence.

*Marks of the War of Liberation* Mass grave 2 (Sreepur College compound and Satkhamar).

*Religious institutions* Mosque 600, temple 5, church 2, tomb 4; noted of which are tomb of Shah Saheb at Sreepur, Satkhamar Darga and Akandabadi Mosque at Kewa.

*Population* 320530; male 51.13 percent, female 48.87 percent; Muslim 95.43 percent, Hindu 4.26 percent, Christian 0.11 percent, Others 0.20 percent; ethnic nationals: Santal, Koch, Rajbanshi and Mandi (50 families).

*Literacy and educational institutions* Average literacy 44 percent; male 42.5 percent, female 45.9 percent. Educational institutions: college 7, madrasa 34, secondary school 45, government primary school 105, non-government primary school 41, NGO operated school 44.

*Newspapers and periodicals* Sreepur Barta (extinct). *Culture organisations* Club 10, public library 1, cinema hall 3, theatre group 6.

*Main occupations* Agriculture 55.7 percent, agricultural labourer 16.02 percent, wag labourer 2.67 percent, transport 2.16 percent, business 9.60 percent, service 4.22 percent, others 9.63 percent.

*Land use* Cultivable land 31454.27 hectares, fallow land 105.96 hectares, single crop 44.06 percent, double crop 49 percent and treble crop land 6.94 percent; land under irrigation 31.62 percent.

*Land control* Among the peasants, 33.06 percent are landless, 22.64 percent marginal, 31.5 percent intermediate, 12.8 percent rich.

*Value of land* Market value of first grade cultivated land about Tk 12000 per 0.01 hectare.

*Main crops* Paddy, wheat, potato, jute, mustard seed, ginger, turmeric, vegetables.

*Extinct and nearly extinct crops* Betel leaf, indigo. *Main fruits* Jackfruit, papaya, pineapple, banana, mango, litchi, guava.

*Fisheries, dairies and poultries* Fishery 36, dairy 1, poultry 10, hatchery 4.

*Communication facilities* Roads: pucca 80 km, semi pucca 20 km and mud road 800 km.

*Extinct and nearly extinct transports* Palanquin, boat, bullock cart.

*Manufactories* Ice factory 5, saw mill 27.

*Cottage industries* Goldsmith 2, blacksmith 10, tailoring 50, welding 12.

*Hats, bazars and fairs* Hats and bazars are 31, most noted of which Sreepur, Maona, Barmi, Rajbari and Kawraid.

*Main exports* Paddy, mustard seed, jute. *NGO activities* BRAC, PROSHIKA, Anvesa Foundation.

*Health centres* Upazila health complex 1, union health centre 4, family welfare centre 6, satellite clinic 6, NGO operated health centre 4. [Tapan Bagchi]

### 3.2.2 Manikganj Sadar Upazila

**Manikganj Sadar Upazila** (MANIKGANJ district) with an area of 214.81 sq km, is bounded by SATURIA upazila on the north, NAWABGANJ (Dhaka) and HARIRAMPUR upazilas on the south, SINGAIR and DHAMRAI upazilas on the east, Harirampur and GHIOR upazilas on the west. Main rivers are DHALESHWARI, ICHAMATI, Kaliganga and Gazikhali.

*Manikganj* (Town) consists of 9 wards and 49 mahallas. The area of the town is 20.59 sq km. It has a population of 53161; male 51.16 percent and female 48.84 percent; density of population is 2582. Literacy rate among the town people is 49.9 percent.



**Figure 3: Showing Manikganj Sadar Upazila (MANIKGANJ district)**

*Administration* Manikganj thana was established in 1845 and was turned into an upazila in 1983. It consists of 13 union parishads, 1 municipality, 311 mouzas and 308 villages.

*Archaeological heritage* Manikganj Jami Mosque, Sree Sree Anandamayee Kalibari (1895), Rajani Bhaban and Jhovat Bhaban (Gangadhar Patty), Matta Math (1894), Narayan Sadhu Asram (1348 B.S), Katchari (revenue office) of Ishu Babu (Hijuli), Sivabari Mandir, Neel-kuthi at Baimail.

*Historical events* A severe battle was fought at Garhpara between the Bengal sultan Sikandar Shah and his son Ghiyasuddin Azam Shah, ruler of Sonargaon, in which Sikandar Shah lost his life. Mir Jumla, the Mughal *subadar* of Bengal, established a military outpost and administrative centre at Garhpara in 1662. Following its political importance Garhpara subsequently developed into a river-port. The port flourished enormously during the British rule and played important role in the inland trade of Bengal. During the Liberation War of 1971 a battle was fought between the freedom fighters and the Pakistani army at village Kagajinagar on 12 December

*Marks of War of Liberation* Memorial monument at a place adjacent west to the Manikganj Bus-stand built on the sacred memory of 49 martyr freedom fighters.

*Population* 237771; male 50.23 percent, female 49.77 percent; Muslim 85.65 percent, Hindu 14.2 percent, Christian 0.02 percent and ethnic nationals 0.13 percent.

*Religious institutions* Mosque 314, temple 90, mazar 10, dargah 2, sacred place 1. Notable religious institutions: Manikganj Jami Mosque, Court Mosque, Seota Graveyard Mosque, Bus-stand Jami Mosque, Porra Mosque, Beutha Mosque, Betila Mosque, Bhatbaur Jami Mosque, Bazar Mosque, Uchutia Jami Mosque, Vikra Jami Mosque, tomb of Mafizuddin (Dashra), Gorhpara Imambari mazar, Rahim Darbar Sharif (Bhatbaur), Khoda Baksh Darbar Sharif (Bhatbaur), Sree Sree Anandamayee Kalibari, Lakshmi-mandap, Sivabari Mandir, Garhpara Mandir, Dautia Mandir, Sivabari Hindu tirtha (sacred place).



*Literacy and educational institutions* Average literacy 56 percent; male 57.24 percent, female 54.76 percent. Educational institutions: college (government) 2, college (non-government) 5, law college 1, primary teacher's training institute 1, veterinary training institute 1, high school (government) 2, high school (non-government) 29, madrasa 3, music school 1, local centre of Bangladesh Open University 1, primary school (government) 88, primary school (non-government) 19. Old and noted institutions: Manikganj Government High School (1884), Manikganj Model High School (1918), SK Government Girl's High School (1930), Khabaspur Lavanya Prava High School (1941), Lemubari High School (1949), Garhpara High School (1959), Garhpara Arzu Banu High School (1969), Betila Multilateral High School (1960), Matta Valika High School (1970), Navarun High School (1970), Jainagar High School (1970), Garhpara New Model High School (1972), Government Devendra College (1942), Government Mahila College (1972), Manikganj Islamia Senior Madrasa (1953).

*Newspapers and periodicals* Weeklies: Alor Bani, Muktir Vahana, Karcha, Manikganjer Khabar, Ababil; (extinct) Weekly Manikganj, Manikganj Barta, Weekly Budhbar, Weekly Pataka, Chalaman, Muktir Dak, Navagram, Jagarani, Ritu-rang-man, Abahaman, Maitree International, Bitapa.

*Cultural organisations* Club 120, public library 2, literary organisation 3, women's association 2, theatre group 15, jatra party 8, theatre stage 3, cinema hall 3.

*Main occupations* Agriculture 33.75 percent, agricultural labourer 17.82 percent, fishing 1.67 percent, industry 1.14 percent, construction 1.36 percent, commerce 13.47 percent, service 11.38 percent, transport 3.33 percent, wage labourer 4.77 percent and others 11.31 percent.

*Land use* Cultivable land 16,659 hectares, fallow land 138 hectares; single crop 9.36 percent, double crop 61.25 percent and triple crop land 29.39 percent. Cultivable land under irrigation 48.02 percent.

*Land control* Among the peasants, 21 percent are landless, marginal peasant 65 percent, inter mediate 10 percent and 4 percent rich; cultivable land per head 0.07 hectare.

*Value of land* The market value of the first grade arable land is Tk 8500 per 0.01 hectare.

*Main crops* Paddy, wheat, jute, tobacco, potato, pulse, sugarcane, oil seed, onion, garlic, pepper, vegetable.

*Extinct or nearly extinct crops* Linseed, china, *dabri*, barley, *kaun*, pea, vetch (gram), sesame.

*Main fruits* Mango, jackfruit, banana, papaya, guava, coconut, palm.

*Fisheries, dairies and poultries* Fishery 13, livestock and dairy 329, poultry 644, hatchery 5.

*Communication facilities* Roads: pucca 92 km, semi pucca 15 km and mud road 498 km; waterways 16 nautical mile.

*Traditional transport* Boat, bullock cart, horse carriage, push van, canoe, earthen bowl, vela (boat made of plantain tree). These means of transport are either extinct or nearly extinct.

*Manufactories* Heavy industry 4, medium industry 5, small industry 378.

*Cottage industries* Weaving 312, silk industry 10, conch bangle industry 15, brass metal industry 12, bidi factory 2, welding 97, packaging industry 15, book binding industry 10, candle and agar industry 13, molasses industry 25, miscellaneous repairing workshop 138, miscellaneous industry 42, bamboo work 327, goldsmith 125, blacksmith 48, potteries 307, wood work 92, tailoring 205.

*Hats bazars and fairs* Hats and bazars are 21, fair 12, noted of which are Bangladesh Hat, Jaira cattle hat, Dautia, Atigram, Manikganj Bazar, Beutha Bazar, Bus-stand Bazar, Manikganj Rath Mela, Rash Mela (Betila), Sivabari Mela, Baisakhi Mela (Panjankhara), Maharram mela (Garhpara Imambari), Nimai Chander Mela (Krishnapur).

*Main exports* paddy, wheat, flour, milk, molasses, pulse, oil seed, cattle, poultry, vegetables, bamboo, cane, brick, bidi, brass metal products, gas cylinder.

*NGO activities* Operationally important NGOs are BRAC, PROSHIKA, GRAMEEN BANK, SPUS, Dak, ASA, Gana Kalyan Trust, Arab, VON (a total of 98 NGOs).

*Health centres* Sadar hospital 1, maternity and child care centre 1, private clinic 4, satellite clinic 1, family planning centre 10. [MA Ramzan]

# Chapter 4

## Sanitation in the Context of Bangladesh

Sanitation can be defined as the management systems that ensure the hygienic disposal of excreta and waste water at household level and results in a clean and healthy living environment around the home, including the management of solid waste (domestic and industrial), and treatment of sewage effluents.

The sanitation sector therefore encompasses everything from investment in large infrastructure such as trunk sewers, via simple ‘on-site’ toilets for individual households, to provision of ‘soft’ items, e.g. support for women’s groups seeking to change defecation practices in their community.

Bangladesh is committed to achieve the Millennium Development Goals (MDGs). This commitment is reflected in the poverty reduction strategy paper (GoB, 2005) that envisages reducing infant mortality rate from the 2000 benchmark value of 66 to 37 by 2010 and 22 by 2015. Similarly, child mortality is to be reduced from 94 to 52 by 2010 and 31 by 2015. To achieve these targets, the government has emphasized improving sanitation as a national priority. In response to the global call, the water target 10 of the MDGs, subsequently expanded in WSSD in Johannesburg in 2002 to include sanitation target, the Government of Bangladesh set its national target of achieving 100 percent sanitation by 2010. This challenging target is much ahead of MDGs target. But GoB has realized the importance of sanitation for sustainable development and put emphasis on achieving the target that will have immense impact on poverty reduction.

## **4.1 Policy framework**

### **4.1.1 The National Policy for Safe Water Supply and Sanitation 1998**

This is the basic policy document governing the water supply and sanitation sector. The policy mentions that the Government's goal is to ensure that all people have access to safe water and sanitation services at an affordable cost. The policy emphasizes elements of behavioral changes and sustainability through user participation in planning, implementation, management, and cost sharing. Ensuring the installation of one sanitary latrine in each household in the rural areas and improving public health standard through inculcating the habit of proper use of sanitary latrines is mentioned as one of the major objective.

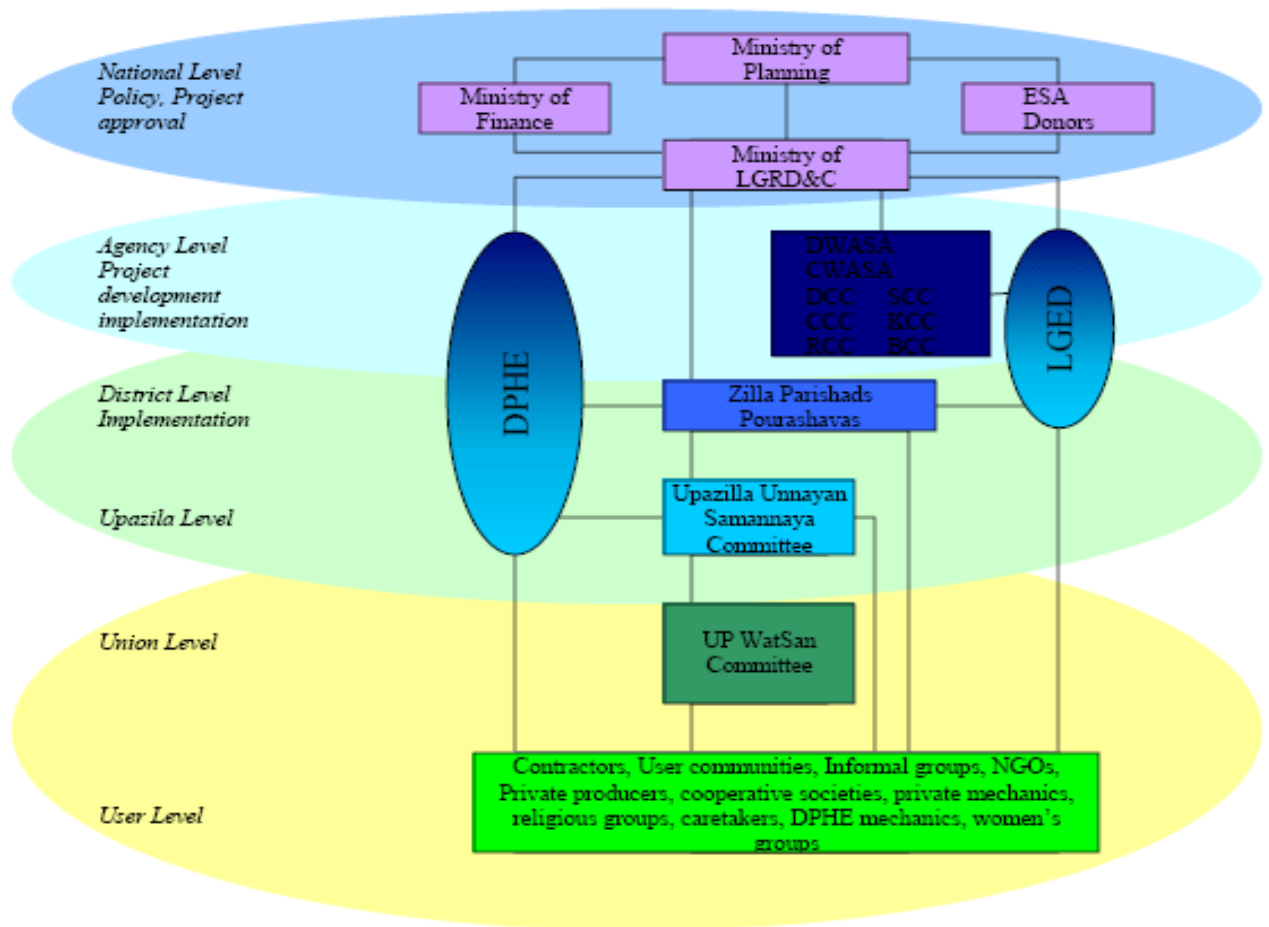
Local government and communities shall be the focus of all activities relating to sanitation. All other stakeholders including the private sector, and NGOs and development partners shall provide inputs into the development of the sector within the purview of overall government policy with the Department of Public Health Engineering (DPHE) ensuring coordination.

In case of hard-core poor communities, educational institutions, mosques and other places of worship, the costs may be subsidized partially or fully. Credit facilities are to be provided for the poor to bear costs of water and sanitation services. Private sector and NGO participation in sanitation shall be encouraged. Within a specified period legislation shall be enacted making use of sanitary latrine compulsory.

### **4.1.2 Institutional Framework**

The statutory responsibility for the sanitation sector is vested in the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C), which shares with the Planning Commission the tasks of policy decisions, sectoral allocation and funding, as well as project appraisals, approval, evaluation and monitoring. The functional responsibility is delegated to the DPHE in all rural and urban areas except

Dhaka and Chittagong. In Dhaka and Chittagong, water and sewerage (Dhaka only) are handled by the Water and Sewerage Authorities (WASAs). City Corporations (CC) in Dhaka, Chittagong, Khulna, Rajshahi, Sylhet and Barisal have responsibilities in waste management. Figure 4 below illustrates these institutional arrangements.



**Figure 4: Institutional arrangement for water supply and sanitation**

## 4.2 Key Actors in the Sector

- DPHE is responsible for planning, designing and implementing water supply and sanitation services in rural areas, Upazila (sub-district) towns and Pourashavas (municipalities). DPHE has supervisory staff at Zila (district) and Upazila levels

and is represented at Union Parishad (Union Council) level by tube well mechanics and masons. One executive engineer is assigned to each of the Zila offices.

- Local Government Engineering Department (LGED) although has no mandate, implements some WSS activities as components of larger projects.
- Water Supply and Sewerage Authorities (WASAs) are semi-autonomous bodies with management entrusted to boards and report directly to MLGRD&C. Dhaka WASA has charge of water supply, subsurface drainage, and sewerage. Chittagong WASA, in the absence of sewerage, deals only with water supply.
- Dhaka City Corporation (DCC) is in charge of solid waste management, surface drainage and implementation of on-site sanitation. Chittagong, Rajshahi, Khulna, Sylhet and Barisal CCs are responsible for surface drains, solid waste management and maintenance of water supply provided by DPHE and LGED.
- Pourashavas (Municipalities) are under the administrative control of the Ministry of LGRD&C, and their chairmen and the committee of ward commissioners are locally elected. The Pourashavas are responsible for development and maintenance of social services and physical infrastructure in municipal areas. The Pourashavas collect and dispose of solid wastes and are mandated to maintain a sanitary environment.
- Zila Parishad (District Councils) consists of elected and appointed members and are directly involved in planning, implementation and monitoring of development activities within the district.
- Upazila *Unnayan Samannaya* Committees (Upazila Development Coordination Committees), chaired in turn by Union Parishad chairmen, shoulder responsibility for planning, implementation and evaluation at Upazila level. Upazila \Parishad

also consists of elected and appointed members. Water and sanitation provisions of the Upazila centers are the responsibilities of the Upazila committees.

- Union Parishads are responsible for promotion of hygiene education and creation of awareness about environmental sanitation among the rural population. The Union Water Supply and Sanitation Committees, which exist in all Unions are comprised of Ward member as chairman and community leaders and DPHE representatives and play an important role in distribution of tube wells and sanitary latrines. The Union Parishads co-operate with DPHE and Upazila committees in identifying households for government funded water supply and sanitation activities.
- Non-governmental organizations (NGOs) are active in sanitation program financing and implementation in both urban and rural areas. NGOs endeavor to integrate community participation with hygiene education, water supply and sanitation. Their mode of operation primarily is to focus on village-level activities. Their extensive presence has offered opportunities for international donors and UN agencies including UNICEF to reach low income rural and urban communities.
- Private sector is responding well to the stimulated demand by the government sanitation program. Latrine components like ring, slabs are widely available through private outlets along side DPHE sanitation centers. People in many rural communities are making their living producing latrine components and working as plumbers.
- Multilateral support is being provided by UNICEF, IDA, ADB, and WHO. Support for projects in Zila towns has been given bilaterally by Danida, the Netherlands, and JICA of Japan, and multilaterally by the Asian Development Bank. Assistance has been extended to Dhaka and Chittagong by IDA and by the Asian Development Bank. The World Health Organization is facilitating



development in operational capabilities and human resources, including project planning, implementation, monitoring, and evaluation.

### **4.3 Current sanitation coverage**

The Government had conducted a National Baseline Survey in October 2003 to assess the extent of sanitation coverage. Out of a total number of 21,394,093 families in the country, only 7,108,362 families (33.23%) were using hygienic latrines. This striking survey finding led the government to launch the National Sanitation Campaign. It was realized that full sanitation coverage would not be possible without ensuring access of the hardcore poor to basic sanitation. In January 2004, the government took initiative towards decentralization and involvement of local government institutions along with increasing financial allocation for the hardcore poor. The government earmarked 20 percent of Upazila ADP grant for sanitation and kept it at the disposal of Upazila and Union Parishads. It further earmarked 25 percent of this allocation for the motivational activities and the rest 75 percent for the 'hardware' subsidy for the hardcore poor (DANIDA - 1999).

A multi-media awareness campaign was launched in the country to increase awareness about hygiene and sanitation. It was followed by country wide, Divisional and District Orientation workshops for sensitizing and motivating key stakeholders towards contributing to the national sanitation campaign. As a result of these moves the country has now been able to achieve 78.62 percent coverage at the end of June 2006, which is an increase of about 45.39 percent from the baseline in October 2003. The extent of sanitation coverage in three broad areas/zones - Rural, Pourashavas and City Corporations is represented in Table 2.

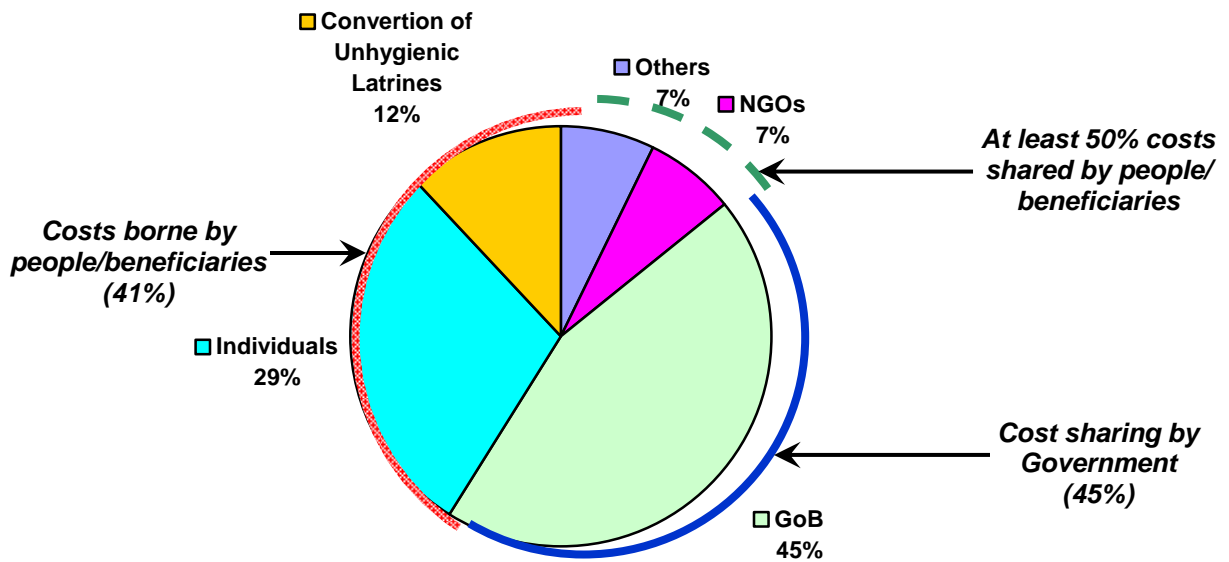
**Table 2: Area-wise sanitation coverage as of June, 2006**

Sl No.	Area	According to Baseline Survey, October 2003			% of families using Sanitary Latrines as of Dec '05
		Total number of families	No. of families using Sanitary Latrines	% of families using Sanitary Latrines	
1	2	3	4	5	6
1	Rural	18,326,332	5,272,589	28.77	86
2	Pouroshavas	1,851,337	983,025	53.10	88
3	City Corporations	1,216,424	850,527	69.92	84
<b>Country Total:</b>		<b>21,394,093</b>	<b>7,106,141</b>	<b>33.21</b>	<b>86</b>

(Source: Sanitation Secretariat, 2006)

The Table 2 provides interesting observation that while the country achieved an increase in sanitation coverage by 45.39 percent between October 2003 and June 2006, maximum increase was in rural areas to the extent of 48.98 percent, followed by Pourashavas (30.87 %) and City Corporations (13.73 %). As of June 2006, four Districts out of 64, 41 Paurashavas out of 307, 68 of 470 Upazilas and 946 out of 4488 Union Parishads have achieved 100 percent sanitation coverage (Sanitation Secretariat, 2006). The momentum is on with a healthy competition and steadily each and every Union, Upazila and District is progressing towards the national goal.

Figure 5: below indicates the contributions made by different stakeholders in increasing the rural sanitation coverage at the country level.



**Figure 5: Contributions of various groups towards Rural Sanitation Coverage (Country total) as on June 2006 (Sanitation Secretariat, 2006)**

It is clear that people themselves have made significant investment. In the category, ‘Individuals’ and ‘Conversion of Un-hygienic latrines’, which is a total of 41 percent of the progress, there is 100 percent cost sharing by the people/beneficiaries. In the category of ‘NGOs’ and ‘Others’ too, a total of 14 percent progress, one can safely estimate that beneficiary’s contribution would be at least 50 percent.

It is evident that government-led ‘mass-media campaign’ to increase awareness about sanitation has led to an increased demand for sanitation in the country and people are taking initiative to change their habit of ‘open defecation’. The contribution of different development partners and NGOs to support the government initiative has also contributed towards this achievement. Besides, at the local level, the role of Local Government Institutions has been laudable.

The Union Parishad and Gram Sarkars (Village Government) have contributed to 8 percent and 15 percent, and a total of 23 percent progress, respectively (Shamsuddin *et al.*, 1999). This relates only to the progress related to providing latrines to the hardcore poor. In addition to this, they are contributing by way of promotional activities in their

respective jurisdictions, which have to a large extent motivated ‘non-hardcore’ poor to establish their own hygienic latrines, at their own cost.

Realizing the importance of the role of the LGIs and eventually taking some groundbreaking decisions like earmarking of 20 percent ADP grant to Upazila for Sanitation to activate them was proven to be very effective in achieving such a high progress. Government willingness to work in partnership with the NGOs, development partners, civil society and private organizations functioned as a catalyst in the sanitation sector and everyone contributed for the betterment of the sanitation coverage in the country.

To ensure sanitation for all, the decision of ‘hardware (hygienic latrines) subsidy for the hardcore poor only’ has revealed a positive outcome. It would not have been possible to achieve 100 percent sanitation in many areas of the country in such a short period without this subsidy to the hardcore poor. Rewards to all those who have achieved 100 percent sanitation coverage, in recognition to their successes created a healthy competition among the LGIs that further accelerated the progress.

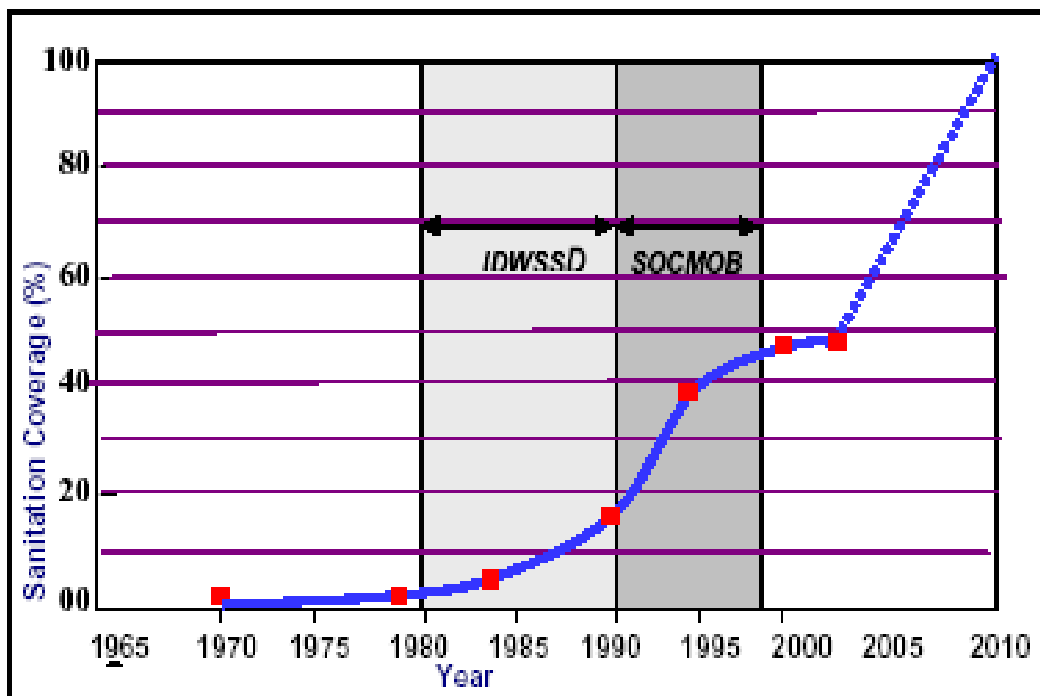
Giving due emphasis on sustainable development of sanitation sector is another dimension of Bangladesh approach towards 100 percent sanitation for all. To ensure sustainability, sanitation secretariat is regularly monitoring the progress of sanitation sector. In addition, GoB has earmarked funds for hygiene promotion and community mobilization and also providing performance-based incentives for sanitation sustainability. Development of hygiene messages targeting hygiene promotion, solid waste and wastewater management, launching of mass-media sanitation campaigns are some major activities in this regard.

#### **4.4 The past achievement and target**

The Government of the People’s Republic of Bangladesh has set a target to achieve “*Total Sanitation by 2010*” shortening the initial target of “*Total Sanitation by*

2015". The target was rescheduled observing enthusiastic response to renewed 'National Sanitation Campaign' launched in the country. The month of October has been declared as *Sanitation Month* in Bangladesh. The government, NGOs and development partners have joined hands to bring the entire country under sanitation coverage. The past achievement in sanitation and the future target and the growth rate to achieve total sanitation by 2010 is shown in Figure 2.

In order to achieve this target, the population coverage by sanitation has to be increased to about 9 percent per annum as compared to 2.5 percent increase envisaged to achieve the global target. The increase in sanitation coverage at a rate 3.5 times higher than the global rate of achievement is a challenging task but not impossible to achieve. There is an indication of success in past achievements in Bangladesh. The target can be achieved, if the annual increase in sanitation coverage as achieved in early phase of the social mobilization can be maintained throughout the remaining period of 7 years. This will require a massive sanitation campaign from national to village levels.



**Figure 6: Sanitation coverage achieved and future target in Bangladesh**

## 4.5 Important government decisions

As mentioned earlier, the Government has allocated 20 percent of the Annual Development Programme (ADP) fund to Upazilas for improving sanitation coverage. One important aspect of the decision is that the focal point of the national sanitation campaign is the Union Parishad at rural level and in urban is Ward of Municipalities and City Corporations. The Union Parishads have been entrusted with the task of latrine distribution and promotion. Important policy decisions taken by the government to ensure progress in sanitation sector of Bangladesh are as follows:

- **Decision for achieving 100 percent sanitation by 2010:** The government publicly announced its resolve to achieve 100 percent Sanitation for all by the year 2010. This public commitment led to commitments at all levels of the government and development partners for realizing this goal.
- **Earmarking of 20 percent ADP grant to Upazila for sanitation:** In order to involve Local Government Institutions in the process of planning and implementation of sanitation campaign, and to enhance the funds availability at the local level, the government earmarked 20 percent of ADP grant for sanitation activities. This made Taka 40 Crores available at the hands of Upazilas, every year.
- **Targeting hard-core poor with government grant:** The government earmarked 75 percent of the ADP grant for sanitation hardware (hygienic latrines) for the benefit of hardcore poor only. This way, all hardcore poor in the country can/would be covered by the 'least cost feasible option' of hygienic latrines, by the year 2010.
- **Earmarking funds for hygiene promotion and community mobilization:** The government has earmarked 25 percent of 20 percent ADP grant for the software

activities aimed at hygiene promotion and community mobilization. This will help motivate people to spend their own money for building their latrines.

- **Directly involving Gram Sarkars in the sanitation campaign:** A fund of Taka 10,000.00 was released to each ward member, which they could use for increasing the sanitation coverage in his/her ward involving the gram sarkars.
- **Recognition/Awards to all those who achieved 100 percent sanitation coverage:** By now, chairpersons of 189 Union Parishads, Upazila Nirbahi Officers of 9 Upazilas and Chairpersons of 4 Pourashavas, that have achieved 100 percent sanitation coverage, have been awarded citations by the Minister as a mark of public recognition to their efforts. Also, Deputy Commissioners, NGOs and Development Partners have been publicly awarded. Documentary films for countrywide dissemination have been made on success stories of Upazila Nirbahi Officers and Union Parishad Chairmen, who have achieved 100 percent sanitation coverage. This has increased the motivation level and has created competition among LGIs. However, careful monitoring and review are needed to ensure that all criteria for declaring 100 percent sanitation are fulfilled.
- **Performance-based incentives for sanitation sustainability:** The government has sanctioned an amount of Taka 200,000 for those Unions, which have achieved 100 percent sanitation coverage. These funds are to be used by them for ensuring the sustainability, improving hygiene behavior and environmental sanitation.
- **Allocating Funds to DPHE for producing and distributing hygienic latrines to hardcore poor:** The government has sanctioned Taka 25 Crores to DPHE for producing and distributing hygienic latrines to hardcore poor. This would enhance the availability of good quality latrines for hardcore poor.
- **Development of hygiene messages:** The government has prepared hygiene messages for those Union Parishads, where 100 percent latrine coverage has been

achieved. These will be developed in the form of a Hygiene Manual and circulated to all Union Parishads and Pourashavas. This would be followed by capacity building of these local governments for disseminating these messages.

- **Mass-Media sanitation campaigns:** The government followed a multi-media sanitation campaign for creating mass awareness for adopting improved sanitation practice. All forms of media - Print, Television, Folk Arts, Radio, Wall Writing, Hoardings, Posters, Miking, Meetings, etc., were adopted in this campaign.

#### **4.6 Development of national sanitation strategy**

The SACOSAN 2003, in its last working session on Bangladesh country paper, identified the importance of a National Sanitation Strategy (NSS) based on which Plan of Action at local levels could be prepared. Accordingly the National Sanitation Taskforce decided to develop the National Sanitation Strategy.

A participatory approach was adopted in developing this strategy. Consultative meetings were organized with stakeholders from the central to the grass roots level. Experience gathered from interaction with community people and LGI representatives assisted to formulate this pragmatic strategy paper. Comments from different stakeholders reinforced the strategy paper further.

The National Sanitation Strategy is based on guiding principles included in the “Dhaka Declaration” of first SACOSAN held in 2003. The NSS is prepared for application in all conditions, in rural and urban areas, in rich and poor communities and whether sanitation is an individual household system or a community effort.

The strategy emphasizes on

- Creating effective demand through health education and hygiene promotion
- Ensuring individual and community actions
- Activating LGIs to play the key role for improving sanitation coverage



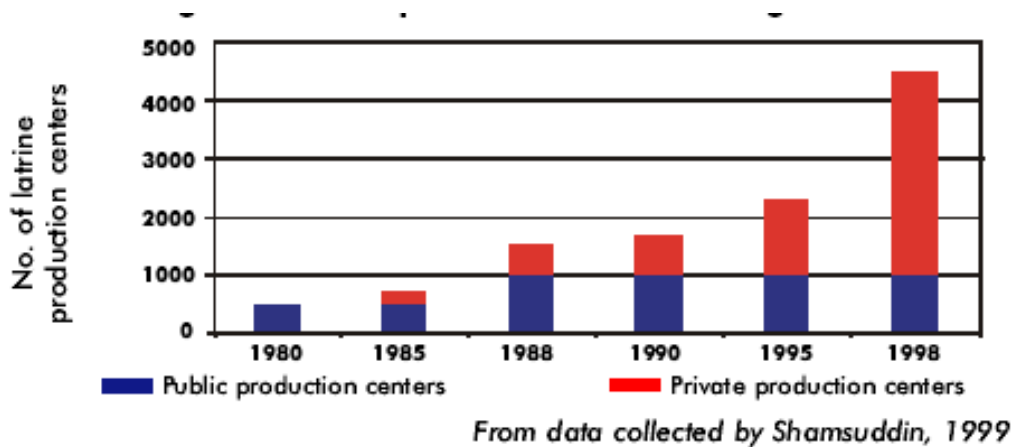
- Facilitating adequate supply chain of hygienic latrines
- Reaching the hardcore poor
- Strategies for improved urban sanitation
- Media campaign
- Strategies for sustainability
- Financing for sanitation programs
- Strategies for emergency response

#### **4.7 Private sector participation in sanitation in Bangladesh**

Twenty-five years ago, the private sector was almost completely uninvolved in the provision of goods and services for rural water supply and sanitation in Bangladesh. The situation is radically different today; it is estimated that there are 3,000 privately run latrine production centers, accounting for more than 65 per cent of the sanitation market. Bangladesh bears testament to the private sector's success in creating effective supply chains for sanitary goods, which are now available from traders throughout the country, with competition keeping prices reasonable and products reliable. The private sector has demonstrated clear advantages over the public and NGO sectors in reducing production costs, and in the efficient distribution of goods and services. Whilst much of this success is undoubtedly due to the particular conditions and circumstances found in Bangladesh, it is also clear that some of the strategies used to encourage private sector participation are general and should be replicable in other countries.

Twenty-five years ago, the private sector was almost completely uninvolved in the provision of goods and services for rural water supply and sanitation. The development of latrines, and the rapid expansion of demand for these goods, has resulted in a radically different situation today. There is little reliable information available on the number of sanitary latrines in Bangladesh, but it is generally agreed that there are now in excess of four million, and that more than 65 per cent of these are privately owned. There are now about 4,500 latrine production centers in Bangladesh, of which about 900 are government-run, another 600 are NGO-sponsored, and the remaining 3,000 are private

latrine production centers (WSP, 2000). This suggests that, as in the rural water supply sector, more than 65 per cent of the sanitation market is controlled by the private sector.



**Figure 7: Latrine production centers in Bangladesh**

During the early 1980s, UNICEF assisted the Department of Public Health Engineering (DPHE) to set up small public latrine production centers that manufactured and distributed concrete latrine slabs, concrete rings and other latrine components. Initially, the latrine slabs were provided free, but the project soon began selling the latrine products, albeit at a subsidized price.

This program was moderately successful, and contributed to household access to sanitary latrines, improving from only one per cent in 1971, to 16 per cent in 1990 (WSP, 2000). However, it was recognized that this growth was still not enough to meet the government’s sanitation target of 80 percent coverage by 2000 and that a change of approach was needed. More social mobilization was introduced, using partner NGOs, and the public latrine production centers have now sold more than 2.3 million sanitary latrines (ibid).

By the mid-eighties, the private sector was becoming involved in the manufacture of latrine components, and some support was provided to these small private production centers by the UNICEF/DPHE project. The intensive social mobilization campaigns

mounted in the 1990s appear to have stimulated demand and these private producers were successful, despite competition from the subsidized public and NGO production centers. There are now more than 3,000 private latrine production centers around the country, and UNICEF has dramatically reduced their support for the government production centers. How did the private producers manage to compete with the subsidized products and the more organized support network enjoyed by the public producers? A DANIDA evaluation (DANIDA, 1999) reported that the public latrine production centers offered a limited range of goods, often had a lot of unsold stock which was of low quality, and that customers found the procedures for obtaining the subsidized goods to be inflexible and overly bureaucratic. In contrast, the more conveniently located private production centers were perceived to offer a wider variety of products, to be more flexible, to allow payment in installments, to provide installation services, and to offer simpler, and thus cheaper, latrine designs than those available from the public producers. According to some estimates, small-scale private producers now supply over 90 percent of the sanitary hardware used by rural households in Bangladesh. As a result, donors and NGOs have altered their role once again. They are now more involved in stimulating demand, through the promotion of the health and “non-health” benefits of sanitary latrines, and in improving the quality of the products available on the open market by providing training to the private producers.

# Chapter 5

## Findings and Discussions

This chapter narrates the findings of field data collected from Sadar Upazila of Manikgonj District and Sreepur Upazila of Gazipur District. Manikgonj Sadar has been considered as 100 percent sanitation covered area in this context.

### 5.1 Personal information about the Respondents in the study areas

#### 5.1.1 Overview of the inhabitants in the selected sites

**Table 3: Overview of the inhabitants in the selected sites**

Manikgonj Sadar Upazila		Sreepur Upazila	
<i>Total Population</i> 2,37,771		<i>Total Population</i> 3,20,530	
Male 50.23 %	Female 49.77 %	Male 51.13 %	Female 48.87 %
Literacy	Male 57.24 %   Female 54.76 %	Literacy	Male 42.5 %   Female 45.9 %
Agriculture	33.75 %	Agriculture	55.7 %
Commerce	13.47 %	Business	9.60 %
Service	11.38 %	Service	4.22 %
Others	11.31 %	Others	9.63 %

Source: Field Survey, 2008. (Data from Upazila Administration.)

It is evident from the table 3 that in Sreepur female are more literate than the male, where in Manikgonj male are higher than female.

### 5.1.2 Occupation of the Respondents in the study area

It is revealed from the Table 4 that maximum number of the respondents in both the areas are involved in govt. service and business.

**Table 4: Occupation of the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila		Total	
<b>Total Respondents</b>	50		40		90	
Occupation	No.	%	No.	%	No.	%
Govt. Service	12	24	09	22.5	21	23.33
Non- Govt. Service	04	08	06	15	10	11.11
Business	13	26	11	27.5	24	26.67
Student	07	14	04	10	11	12.22
Agriculture	11	22	07	17.5	18	20
House Wife	03	06	03	7.5	06	6.67

Source: Field Survey, 2008

### 5.1.3 Education level of the Respondents in the study area

It is clear from the Table 5 that about 20 percent respondents in Manikgonj Sadar are obtaining B.Sc & above degree, whereas in Sreepur it is about 18.89 percent.

**Table 5: Education level of the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila		Total	
<b>Total Respondents</b>	50		40		90	
Education level	No.	%	No.	%	No.	%
Illiterate	02	04	03	7.5	05	5.56
Primary	05	10	06	15	11	12.22
High school	11	22	10	25	21	23.33
S.S.C	14	28	09	22.5	23	25.56
H.S.C	08	16	05	12.5	13	14.44
B.Sc & above	10	20	07	17.5	17	18.89

Source: Field Survey, 2008

#### 5.1.4 Income level of the Respondents in the study area

Maximum respondents in both the areas are in middle income people and their income ranges from Tk. 5,001-10,000.

**Table 6: Income level of the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Monthly income	No.	%	No.	%
Low income (upto 3,000/=)	05	10	03	7.5
Lower middle (3,000-5,000/=)	12	24	09	22.5
Middle income (5,001-10,000/=)	15	30	14	35
Upper middle (10,001-15,000/=)	12	24	09	22.5
High income (15,001 and above)	06	12	05	12.5

Source: Field Survey, 2008

#### 5.1.5 Period of stay of the Respondents in the study area

In Manikgonj Sadar it is found that about 36 percent respondents have been living in this area for more than 10 years and in Sreepur it is about 27.5 percent. But maximum respondents i.e. about 37.5 percent in Sreepur have been living in that area for about 7 to 9 years.

**Table 7: Period of stay of the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Duration of stay	No.	%	No.	%
1-3 years	05	12	04	10
4-6 years	09	18	10	25
7-9 years	17	34	15	37.5
10 years or more	18	36	11	27.5

Source: Field Survey, 2008

## 5.2 Research findings of the study areas

Research findings of this section are presented below in the tabular form. Only the gist of each table is narrated .

### 5.2.1 Types of latrines used by the Respondents

In Manikgonj Sadar cent percent people are using sanitary latrines (table 8). Some has individual and some other has joint latrine. On the other hand, in Sreepur about 12.5 percent respondents have no toilet facilities at all.

**Table 8: Use of latrine by the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Opinions	No.	%	No.	%
Have latrine	36	72	23	57.5
Have joint latrine	14	28	12	30
No latrine	00	00	05	12.5

Source: Field Survey, 2008

### 5.2.2 Status of the latrine used by Respondents

**Table 9: Status of the latrine used by Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Opinions	No.	%	No.	%
Have hygienic latrine	19	38	08	20
Have no hygienic latrine	31	62	27	67.5

Source: Field Survey, 2008

It is revealed from the Table 9 that 38 percent respondents in Manikgonj and only 20 percent in Sreepur are using hygienic latrine. About 62 percent in Manikgonj and 67.5 percent respondents in Sreepur are using unhygienic latrine.

### 5.2.3 Maintenance & cleanliness of latrine by the Respondents

The Table 10 indicates that about 52 percent respondents in Manikgonj Sadar and about 32.5 percent in Sreepur have expressed their views that their latrines are in good position. Super structure latrines have also been found in both the areas. Broken latrines are comparatively higher in Sreepur Upazila and it is about 35 percent whereas in Manikgonj it is about only 10 percent.

**Table 10: Maintenance & cleanliness of latrine by the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Opinions	No.	%	No.	%
Super structure	06	26	03	12.5
Good	13	52	05	32.5
Bad	26	12	13	7.5
Broken	05	10	14	35

Source: Field Survey, 2008

### 5.2.4 Installation of latrine in the Respondents areas

It is evident from the Table 11 that in Manikgonj maximum respondents explained their latrines are installed by the help of NGOs, and in Sreepur about 52.5 percent latrines are installed by the respondents by his own. Latrines supplied by the Union Parishad are more or less same in both the areas.



**Table 11: Installation of latrine in the Respondents areas**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Opinions	No.	%	No.	%
Installed by the Respondents	12	24	21	52.5
Supplied by the Union Parishad	13	26	09	22.5
Supplied by the NGOs	25	50	05	12.5

Source: Field Survey, 2008

### 5.2.5 Preservation of water near the latrine

**Table 12: Preservation of water near the latrine**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Preservation of water	No.	%	No.	%
Yes	50	100	23	57.5
No	00	00	12	30

Source: Field Survey, 2008

From the Table 12 it is revealed that water reservoir near the latrine at all the respondent houses in Manikgonj Sadar is present which indicates the health consciousness in that area. But in Sreepur only 57.5 percent respondents has maintained water reservoir near the latrines and about 30 percent respondents do not have excess water near the latrine.

### 5.2.6 Disposal of waste in the hole

In Manikgonj about 79 percent respondents used septic holes and only 21 percent used open hole for sanitation (Table 13). It is just reverse in Sreepur Upazila i.e.,

maximum inhabitants in that area (about 63.63 %) are using open hole as sanitation purpose which poses serious health risks and only 36.36 percent respondents are using septic hole in sanitation system.

**Table 13: Disposal of waste in the hole**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	24		22	
Opinions	No.	%	No.	%
Use of septic hole	19	79	08	36.36
Use of open hole	05	21	14	63.63

Source: Field Survey, 2008

### 5.2.7 Latrine options used by the Respondents

The Table 14 shows that respondents in Manikgonj Sadar have their 100 percent sanitation facility. In Manikgonj ring slab is ranked 1<sup>st</sup> and then septic tank. Offset latrine is ranked 3<sup>rd</sup> and pit latrine is ranked 4<sup>th</sup>. On the other hand, in Sreepur pit latrine is ranked 1<sup>st</sup>, then ring slab. Septic tank is ranked 3<sup>rd</sup> and offset latrine is ranked 4<sup>th</sup>. In Sreepur about 17.5 percent respondents has no definite arrangement for excretion.

**Table 14: Latrine options used by the Respondents**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Options	No.	%	No.	%
Septic tank	15	30	08	20
Ring slab	18	36	09	22.5
Offset	12	24	06	15
Pit	05	10	10	25
Others	00	00	07	17.5

Source: Field Survey, 2008

## 5.2.8 Latrine status in the Institutions of the Respondents areas

**Table 15: Latrine status in the Institutions of the Respondents areas**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	19		14	
Category	No.	%	No.	%
Primary	03	15.79	04	28.57
High school	05	26.32	05	35.71
College	05	31.58	02	21.43
Madrasha	06	26.32	03	14.29

Source: Field Survey, 2008

It is indicated in the Table 15 that in Manikgonj Sadar college authority has arranged highest sanitation facility, whereas it is high in school in the Sreepur area.

## 5.2.9 Locking of latrine during schooling hour

It is shown in Manikgonj Sadar that during schooling hour about 25 percent latrines are kept locked which might be disturbing for the students. But in Sreepur more or less 100 percent latrines are always in unlocked for the free access of all the students.

**Table 16: Locking of latrine during schooling hour**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
No. of school	08		09	
Status	No.	%	No.	%
Locked latrines	02	25	00	00
Unlocked latrines	06	75	09	100

Source: Field Survey, 2008

### 5.2.10 Use of latrine by the family members

**Table 17: Use of latrine by the family members**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
Member of the different family	50		40	
Classification	No.	%	No.	%
Male	25	50	08	20
Female	20	40	09	22.5
Child	05	10	18	45

Source: Field Survey, 2008

It is found in the above (Table 17) that in Manikgonj Sadar about 10 percent especially child don't use latrine directly, whereas in Sreepur it is very high and even some respondents have thrown the infants excreta in open space also.

### 5.2.11 Disposition of infant's excreta in the Respondents areas

It is found in Table 18 that respondents in Manikgonj Sadar don't use open space to drop out the infants excreta which is good sign for human health, but in Sreepur about 35 percent respondents just throw the infants excreta in the open space which might bring health hazards to the surrounding people.

**Table 18: Disposition of infant's excreta in the Respondents areas**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
Total Respondents	50		40	
Options	No.	%	No.	%
Use of latrine	40	80	08	20
Disposition outside the latrine	00	00	14	35
Use of hole	10	20	13	32.5

Source: Field Survey, 2008

### 5.2.12 Respondents priority of different services

It is revealed from the Table 19 that about 58 percent respondents preferred public private partnerships for well sanitation in their area, on the other hand in Sreepur about 45 percent respondents preferred govt. service for sanitation in their area. NGOs and CBOs have more or less same role in sanitation program in both the areas. Here it is mentioned that Manikgonj Sadar is considered as cent percent sanitation covered area in this research.

**Table 19: Respondents priority of different services**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
<b>Total Respondents</b>	50		40	
Priority	No.	%	No.	%
Govt. authority	08	16	18	45
Public private partnerships	29	58	13	32.5
NGOs & CBOs	11	22	09	22.5
Others	02	04	00	00

Source: Field Survey, 2008

### 5.2.13 Respondents view on achieving 100% sanitation at Manikgonj Sadar

It is evident from the Table 20 that in Manikgonj about 80 percent respondents supported the active participation of public private partnerships for achieving 100 percent sanitation in their area. Only 8 percent supported government. services to attain 100 percent sanitation and about 12 percent respondents thought that 100 percent sanitation is obtained through the participation of the NGOs and CBOs.

**Table 20: Respondents view on achieving 100% sanitation at Manikgonj Sadar**

Name of the Area	Manikgonj Sadar	
	Total Respondents	50
Opinions	No.	%
Active participation of public private partnerships	40	80
Role of public service	04	08
Role of NGOs & CBOs	06	12

Source: Field Survey, 2008

#### 5.2.14 PPPs has positive role on achieving 100% sanitation at Manikgonj Sadar

It is revealed from the Table 21 that in Manikgonj about 80 percent officials/ govt. personnel have given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 20 percent thought by other means.

About 70 percent businessmen have given their opinion that to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 30 percent thought by other means.

About 83.33 percent rural people have also given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 16.67 percent thought by other means.

**Table 21: PPPs has positive role on achieving 100% sanitation at Manikgonj Sadar**

Number of Respondents	Category	Participation of public private partnerships			
		Yes		No	
		Number	%	Number	%
05	Officials/Personnel	04	80	01	20
10	Businessmen	07	70	03	30
06	Rural people	05	83.33	01	16.67

Source: Field Survey, 2008

### 5.2.15 View for not achieving 100 percent sanitation in Sreepur Upazila

It is evident from the table 22 that 100 percent sanitation in Sreepur Upazila is not achieved due to the inactive participation of the public private partnership in the respective area and this PPPs inactive role is ranked 1<sup>st</sup> by about 50 percent the respondents (Officials/Personnel's). Lack of co-ordination of different public services is ranked 2<sup>nd</sup> and no participation of NGOs and CBOs is ranked 3<sup>rd</sup> by the respondents (Officials/Personnel's) for not achieving 100 percent sanitation in their areas.

**Table 22: Why 100% sanitation is not achieved in Sreepur Upazila**

Officials/Personnel's view		
Name of the Area		
Sreepur Upazila		
Total Respondents	10	
Opinions	No.	%
Lack of co-ordination of different public services	03	30
No participation of PPPs	05	50
No participation of NGOs and CBOs	02	20

Source: Field Survey, 2008

### 5.2.16 View of the rural people for not achieving 100% sanitation in Sreepur

From the Table 23 it is clear that about 53.33 percent rural people have given their opinion that in their area 100 percent sanitation is not achieved due to the inactive participation of the public private partnership. No participation of NGOs and CBOs is ranked 2<sup>nd</sup> and lack of co-ordination of different public services is ranked 3<sup>rd</sup> by the respondents (rural people).

**Table 23: Why 100% sanitation is not achieved in Sreepur Upazila**

View of the rural people		
Name of the Area	Sreepur Upazila	
Total Respondents	15	
Opinions	No.	%
Lack of co-ordination of different public services	03	20
No participation of PPPs	08	53.33
No participation of NGOs and CBOs	04	26.67

Source: Field Survey, 2008

### 5.2.17 Frequency of cleaning of latrines by the respondents

**Table 24: Frequency of cleaning of the latrine**

Name of the Area	Manikgonj Sadar		Sreepur Upazila	
Total Respondents	50		40	
Frequency	No.	%	No.	%
Every month	00	00	00	00
Every two month	12	24	06	15
More than two months	36	72	32	80
Not applicable	02	04	02	05

Source: Field Survey, 2008

From the Table 24 it is clear that maximum respondent about 72 percent in Manikgonj and about 80 percent in Sreepur are willing to cleaning their latrines every after two months or more. Some respondents in both the areas are careless about the cleaning of their latrines.



## **5.3 Summary of the findings of the study**

### **5.3.1 Personal information about the Respondents**

1. It is evident from the study that in Sreepur females are more literate than the males, where in Manikgonj male literacy is higher than that of females.
2. It is revealed from the study that maximum of the respondents in both the areas are involved in govt. service and business.
3. It is clear that about 20 percent respondents in Manikgonj Sadar hold BA/ B.Sc & above degrees, whereas in Sreepur it is about 18.89 percent.
4. Maximum respondents in both the areas are in middle income people and their income ranges from Tk. 5,001-10,000.
5. In Manikgonj Sadar it is found that about 36 percent respondents have been living in this area for more than 10 years and in Sreepur it is about 27.5 percent. But maximum respondents about 37.5 percent in Sreepur have been living in that area for about 7 to 9 years.

### **5.3.2 Research Findings of the Study Areas**

- In Manikgonj Sadar cent percent people are using sanitary latrines (Table 8). Some has individual and some other has joint latrine. On the other hand, in Sreepur about 12.5 percent respondents have no toilet facility at all.
- It is revealed that 38 percent respondents in Manikgonj and only 20 percent in Sreepur are using hygienic latrines. About 62 percent in Manikgonj and 67.5 percent respondents in Sreepur are using unhygienic latrines.
- The study indicates that about 52 percent respondents in Manikgonj Sadar and about 32.5 percent in Sreepur have expressed their views that their latrines are in

good position. Super structure latrines are also found in both the areas. Broken latrines are comparatively higher in Sreepur Upazila and it is about 35 percent whereas in Manikgonj it is about only 10 percent.

- It is evident from the research that in Manikgonj maximum respondents explained their latrines are installed with the help of NGOs, and in Sreepur about 52.5 percent latrines were installed by the respondents on their own. Latrines supplied by the Union Parishad are more or less same in both the areas.
- It is revealed that water reservoir near the latrines at all the respondents' houses in Manikgonj Sadar is present which indicates the health consciousness in that area. But in Sreepur only 57.5 percent respondents has maintained water reservoir near the latrines and about 30 percent respondents do not have excess water near the latrines.
- In Manikgonj about 79 percent respondents used septic hole and only 21 percent used open hole for sanitation (Table 13). It is just reverse in Sreepur Upazila i.e., maximum inhabitants in that area (about 63.63 %) are using open hole as sanitation purpose which has serious health risks and only 36.36 percent respondents are using septic hole in sanitation system.
- The study shows that respondents in Manikgonj Sadar have their 100 percent sanitation facility. In Manikgonj ring slab is ranked 1<sup>st</sup> and then septic tank. Offset latrine is ranked 3<sup>rd</sup> and pit latrine is ranked 4<sup>th</sup>. On the other hand, in Sreepur pit latrine is ranked 1<sup>st</sup>, then ring slab. Septic tank is ranked 3<sup>rd</sup> and offset latrine is ranked 4<sup>th</sup>. In Sreepur about 17.5 percent respondents have no definite arrangements for excretion.
- It is indicated that in Manikgonj Sadar college authority has arranged highest sanitation facilities, whereas it is high in school in the Sreepur area.
- It is shown in Manikgonj Sadar that during schooling hour about 25 percent latrines are kept locked which might be inconvenient for the students. But in

Sreepur more or less 100 percent latrines are always in unlocked position for the free access of all the students.

- . It is found in the above (Table 17) that in Manikgonj Sadar about 10 percent especially children don't use latrine directly, whereas in Sreepur it is very high and even some respondents thrown the infants excreta in open space also.
- . It is observed that respondents in Manikgonj Sadar don't use open space to drop out the infants excreta which is good sign for human health, but in Sreepur about 35 percent respondents just throw the infants excreta into the open space which might bring health hazard to the surrounding people.
- . It has been revealed from the study that about 58 percent respondents preferred public private partnerships for well sanitation in their area, on the other hand in Sreepur about 45 percent respondents preferred govt. service for sanitation in their area. NGOs and CBOs have more or less same role in sanitation program in both the areas. Here it is mentioned that Manikgonj Sadar is considered as cent percent sanitation covered area in this research.
- It is evident from the research that in Manikgonj about 80 percent respondents supported the active participation of public private partnerships for achieving 100 percent sanitation in their area. Only 8 percent supported govt. service to attain 100 percent sanitation and about 12 percent respondents thought that 100 percent sanitation is obtained through the participation of the NGOs and CBOs.
- It is also revealed from the study that in Manikgonj about 80 percent officials/personnel's have given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 20 percent thought by other means.
- About 70 percent businessmen have given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 30 percent thought by other means.

- About 83.33 percent rural people have also given their opinion to achieve cent percent sanitation to their area is due to participation of public private partnerships, only 16.67 percent thought by other means.
- . It is evident that 100 percent sanitation in Sreepur Upazila is not achieved due to the inactive participation of the public private partnership in the respective area and this PPPs inactive role is ranked 1<sup>st</sup> by about 50 percent the respondents (Officials/Personnel). Lack of co-ordination of different public services is ranked 2<sup>nd</sup> and no participation of NGOs and CBOs is ranked 3<sup>rd</sup> by the respondents (Officials/Personnel's) for not achieving 100 percent sanitation in their areas.

From the above study it is clear that about 53.33 percent rural people have given their opinion that in their area 100 percent sanitation is not achieved due to the inactive participation of the public private partnership. Non participation of NGOs and CBOs has been ranked 2<sup>nd</sup> and lack of co-ordination of different public services has been ranked 3<sup>rd</sup> by the respondents (rural people).

Moreover, it is clear from the study that maximum respondents, about 72 percent in Manikgonj and about 80 percent in Sreepur, are willing to cleaning their latrines every after two months or more. However, some respondents in both the areas are careless about the cleaning of their latrines.

From the above findings it can be easily stated that Manikgonj Sadar Upazila has achieved cent percent sanitation due to the active participation of public and private sectors. Thus it seems that Public Private Partnerships has definitely a positive role in achieving the cent percent goal in the sanitation sector in Manikgonj Upazila.

On the other hand, in Sreepur Upazila, cent percent sanitation goal has not been achieved due to the lack of co-ordination and active participation of the Public and Private sectors. A little has been achieved by the positive role of different NGOs and CBOs.

# Chapter 6

## Conclusion and Recommendations

### Introduction

The concept of public private partnerships has attracted worldwide attention and acquired a new resonance in the context of developing countries. Many Upazilas of Bangladesh have already declared themselves with 100 percent sanitation coverage. In this study it is tried to identify the success factors in achieving this target. This study also examined whether Public Private Partnership (PPP) worked as a success factor in those Upazilas. It has also tried to reveal the causes behind unsuccessful cases of sanitation services delivery.

From this research it can be stated that Manikgonj Sadar Upazila has achieved 100 percent sanitation due to public private partnerships prevailing there. Thus Public Private Partnerships has a positive role in achieving the cent percent goal in the sanitation sector in Manikgonj Upazila. Findings also indicate that that amongst others, firm commitment of all the partners, availability of resources, and clear identification of roles and responsibilities mainly contributed to the success of such partnerships.

On the other hand, in Sreepur Upazila, the model that could not produce the desired results, mainly suffered from the lack of firm commitment of Government, poor monitoring and supervision and 100 percent sanitation goal has not been achieved due to the lack of co-ordination and active participation of the public and private sectors. Only a little was achieved by the positive role of different NGOs and CBOs.

## **Conclusion**

Public private partnerships are beneficial because of the understanding of the public sector objectives and requirements and because of the no profit policy of the target public company. The investment for the capacity building and reform can, for instance, come from a mixture of aid and long term loans from development banks and other organisations. Since the funding is not supplied by one of the partners and neither partner aims to profit, all the efficiencies translate into savings for consumers and investments.

The author concludes that, as it is evident that the PPP concept is being used in Manikgonj Upazila in order to improving public service delivery, it could be a good mechanism for ensuring better sanitation in the rural areas. However, a number of potential and actual challenges are likely to be faced by parties in a PPP arrangement. This is mainly due to the fact that it is not easy to attain adequate critical mass of the requirements for a smooth operation of the PPP concept in developing countries. In light of these challenges therefore, it is further concluded that there is a need for interventions if the PPP concept is to be meaningfully used as one of the strategies for better delivery of public services. There is, therefore, a need for capacity building initiatives in the public as well as private sector.

The findings of this research confirm the importance of private sector participation in the sanitation sector in Bangladesh. Low-cost sanitary latrines are now available in stores throughout the country, and the majority of these products installed in rural households today are bought from private producers or traders.

Public private partnerships are beneficial because of the understanding of the public sector objectives and requirements and because of the no profit policy of the target public company. The investment for the capacity building and reform can, for instance, come from a mixture of aid and long term loans from development banks/ organizations and government as well. Since the funding is not solely supplied by one of the partners

and neither partner aims to profit, all the efficiencies could be translated into savings for consumers and investments.

## **Recommendations**

It is strongly suggested to policy and decision makers to support and facilitate more use of the PPPs concept for better public service delivery. They could also initiate, develop, support and facilitate more capacity building initiatives and development in both the private and public sectors for a more smooth and successful application of the PPPs concept for better service delivery at local, national, sub-regional, regional and global levels.

Making sanitation service accessible to all should not only be considered as one target of MDGs, but also a core responsibility of both national and local governments to satisfy the legitimate rights of all citizens. In this regard, governments are increasingly seeking professional expertise through various forms of PPPs, which are expected to significantly contribute to achieving national objectives in affordable ways. However, successful PPPs require that all partners and stakeholders promote sustainable development through the formulation and implementation of specific policy measures.

The Government of Bangladesh should set the policy and define the framework for appropriate options for partnership, in accordance with its socioeconomic objectives and the interest of all the citizens. The regulators, which should be independent and trusted institutions, monitor the performance of all parties, oversee the award and execution of partnership contracts, and balance the interests of employers, service providers and consumers.

Government should formulate clear legislation and regulatory systems that will give guidance and confidence to all partners, especially to provide operators working in

the sector, to determine their own policies and plans and to protect their financial interests and property rights.

Qualified local, national and regional enterprises should be given the opportunity to compete for PPP. Governments should consider involving small scale providers, which hold a comparative advantage and can play a key role in reaching un-served group of households in both rural and urban areas.

In partnering with private sector operators, government should select appropriate contractual arrangements that are compatible with their socioeconomic constraints and objectives and address the specific needs of poor consumers. PPP contracts should clearly define pro-poor arrangements through establishing adequate tariff systems and policies for service charges and make them affordable and equitable for low income residents.

There are a number of issues that the author would have liked to address in this study but it has not been possible due to, mainly, resources constraints. These are areas where a call for further research in the future is made. The areas include making a similar study in other countries; up calling this study in various ways – including covering more LGAs and other public institutions; making more empirical study, especially on the challenges that parties in various PPP arrangements in various parts of the world face and their proposed ways forward. Over time, there will be a need to update this study. The author welcomes collaborative studies on these and other issues that emanate from this paper.



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# Annexure-1

## Questionnaire Survey

Location: **Manikgonj and Sreepur Upazila**  
Total Respondents: 50+40=90

### Questions for Respondents

1. Will the Public Private Partnerships (PPPs) give 100 % sanitation in your area?
2. Will the PPPs give 100 % pollution free environment in your area?
3. If yes, why the environment becoming pollution free?
  - a. Waste is disposed in the latrine
  - b. Waste is properly managed
  - c. Waste is collected by some one
4. If no, why the environment is not becoming pollution free?
  - a. Improper way of using toilet
  - b. No infrastructure development is occurred
  - c. More development is needed
5. Will the PPP system bring the neatness of the area?
6. Will the PPP system helpful for the rural people?
7. Why the PPP system helpful for the rural people?
  - a. Can fulfill the hygienic condition/requirement
  - b. Partially fulfill the hygienic condition/requirement
  - c. Prevail neatness of the environment

### Particulars of the Respondents

Name:

Designation:

## Annexure-2

### Questions for Officials

1. How big is your Upazila area?
2. What is the population of this Upazila?
3. Do you know how much waste is generated daily?
4. Do you feel to have sanitary latrine to all the people in your area?
5. Do you think every people in your area has sanitary latrine?
6. If yes, how it is possible to have 100 % sanitation?
  - a. Due to the role of public service
  - b. Due to the role of NGOs and CBOs
  - c. Due to the role of public private partnership, or
  - d. Others
7. If no, why it is not possible to have 100 % sanitation?
  - a. Public service don't play any role
  - b. No role played by NGOs and CBOs
  - c. Role of public private partnership is unknown here
  - d. Others
8. Do you have any criteria for selection of latrine site?
9. Do you think to have latrine in each family?
10. Do you think to have latrine for more than one family?
11. Do you think to have communal latrine effective in proper sanitation?
12. Is there any training imparted to the PPPs stuffs and workers?

### Particulars of the Officials

Name:

Designation: