

Course No. GOV 699

**Research Paper on**  
**BRAC's Sanitation Program: A Case Study**

**In partial fulfillment of the requirement for the degree of Master of Arts in  
Governance and Development (MAGD) Studies**

**Submitted to**

Prof. Md. Golam Samdani Fakir, PhD  
VC, Green University, Dhaka

**Submitted by**

Kazi Ziaul Baset  
MAGD 6, Student ID: 14272003



**BRAC Institute of Governance & Development**  
BRAC University, Dhaka, Bangladesh

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## Abbreviations and acronyms

ADP	Annual Development Program
CBO	Community Based Organization
CLTS	Community Led Total Sanitation
DPHE	Department of Public Health and Engineering
DC	Deputy Commissioner
FO	Field Officer
GDP	Gross Domestic Product
GoB	Government of Bangladesh
HHS	House Holds
LGI	Local Government Institute
LGD	Local Government Division
LGED	Local Government Engineering Department
LGRD&C	Local Government and Rural Development & Cooperative
MDG	Millennium Development Goals
MP	Member of Parliament
NGO	Non- Government Organization
NILG	National Institute for Local Government
NSS	National Sanitation Strategy
NWSS	National Policy for Safe Water Supply and Sanitation
PO	Program Officer
SDGs	Sustainable Development Goals
SDP	Sector Development Program
UP	Union Parishad
UNO	Upazila Nirbahi Officer
UNICEF	United Nations Children's Emergency Fund
VERC	Village Education Resource Centre
VHW	Village Health Worker
VSC	Village Sanitation Center
VWC	Village WASH Committee
WASA	Water and Sewerage Authority
WASH	Water Sanitation and Hygiene
WATSAN	Water and Sanitation
WHO	World Health Organization

# Abstract

Bangladesh has made significant progress in the field of sanitation. Bangladesh Government and some NGOs are working to fulfill the targets set for sanitation in the Millennium Development Goals and the more ambitious national goals that seek to achieve 100% sanitation by 2010. In the sanitation arena BRAC's WASH program is a unique one. BRAC's WASH was first launched in 2006 with support from Netherlands in 152 Upazilas (sub-districts). BRAC has currently provided access to hygienic latrines for 41.6 million people, safe water options for 2.3 million people, and hygiene education to an estimated 13.9 million people per year in communities and 2.9 million people per year in schools on average.

On the other hand, as a Government institution, DPHE under Local Government Division exclusively responsible for sanitation and water supply in mainly Upazila and Zila level. There are many local government bodies like Upazila Parishad, Union Parishad and NGOs such as BRAC are trying to achieve 100 % sanitation coverage. Local DPHE office, UNO office and NGOs like BRAC are operating in the Upazila area specifically. To get the expected success coordination is very important among those bodies.

My research work is an empirical study of WASH program in Bholahat Upazila, Chapainawabganj district. The objective of this thesis is to find out whether the WASH program is successfully helping the local residents of the Upazila to improve their health conditions or not. And how the coordination and collaboration of the local administration and NGOs are working in the sanitation sector to achieve success, I tried to find out that in my thesis.

From twenty one respondents, 100 percent are satisfied about the coordination and collaboration of BRAC's WASH with the local administrative bodies. As per the respondents, 28.58 percent are satisfied and 71.42 percent marked as good without any bad opinion on the program activities. Four case studies have been done to get a clear picture of the scenario of sanitation in the selected area.

Eventually, some recommendations and further scope of studies have been given in the last chapter that would be helpful for the proper authority, policy makers and upcoming researchers concerned with water, sanitation and hygiene sector.



## Chapter 1.0 Introduction

### 1.1 General Introduction

#### ***Sanitation is more important than political Freedom***

-The statement is uttered by none other than Mahatma Gandhi, the magnificent leader of all time.

The above mentioned quote substantiates the importance of sanitation and even in religious books like the New Testament and the Quran urges about the necessity of sanitation in our life. **Cleanliness is next to Godliness**-the bottom line message and we all know that proverb from our early childhood. Now let us see what is sanitation? As per WHO's definition the word, '*Sanitation*' generally refers to the provision of facilities and services for the safe disposal of human urine and feces. Inadequate sanitation is a major cause of disease world-wide and improving sanitation is known to have a significant beneficial impact on health both in households and across communities. The word 'sanitation' also refers to the maintenance of hygienic conditions, through services such as garbage collection and wastewater disposal.'

The global commitment of Johannesburg declaration 2002 is to achieve 50% coverage of the un-served population (2.40 Billion) with sanitation facilities by the year 2015. ([www.dphe.gov.bd](http://www.dphe.gov.bd))<sup>1</sup>The Government of Bangladesh declared the target of achieving a state whereby every household in the nation will have a sanitary latrine by 2010. The Government of Bangladesh has taken up an extensive program of "National Sanitation Campaign" in order to ensure Government's commitment of achieving 100% sanitation. In this regard, the month of October, each year has been declared as 'Sanitation Month'. At present, four types of organizations are involved in achieving the target of sanitation coverage. These are 1.Government agencies 2.Local Government Institutions 3.Other organizations like NGOs and 4.Development Partners. As a government institution, DPHE under Local Government Division exclusively responsible for sanitation and water supply mainly in Upazila and Zila level. Local DPHE Office, UNO Office in the Upazila and NGOs like

BRAC are operating together to achieve the targets of sanitation. We should note that in this arena, BRAC is a unique organization from various points of view.

BRAC, an international development organization of Bangladesh, is the largest non-government development organization in the world. Established by Sir Fazle Hasan Abed in 1972, soon after the independence of Bangladesh, BRAC is now present in all 64 districts of Bangladesh as well as in Afghanistan, Pakistan, Sri Lanka, Uganda, Tanzania, South Sudan, Liberia, Sierra Leone, Haiti and the Philippines and it has its presence even in Europe and also in the USA. BRAC is a global leader in creating prospect for the world's underprivileged. It was started as a limited relief operation in 1972 in Bangladesh and has turned into the largest development organization in the world. It achieved this apex position by innovation and commitment to success especially in the field of development activities throughout the nation.

We know that Bangladesh faces multiple challenges in the sanitation, hygiene and water sectors. And sanitation faces its own set of challenges; with only 56% of the population estimated to have had access to adequate sanitation facilities in 2010([en.wikipedia.org](http://en.wikipedia.org))<sup>2</sup> Arsenic in tube well water was first identified in 1993. At present prevalence of Arsenic in drinking water has been identified in 61 out of 64 Districts of the country. (Except, Hilly Districts). However, the degree of contamination varies from 1% to over 90% and the average contamination is 29%. Arsenic in drinking-water is a significant cause of health effects in some areas, and arsenic is considered to be a high-priority substance for screening in drinking-water sources.

Moreover, in spite of concerted efforts to provide safe water, it is estimated that 30 to 35 million people are affected by arsenic contamination in drinking water. There are no reliable country-wide data on hygiene practices. We have (33.22%) households with hygienic latrines nationally. ([www.dphe.gov.bd](http://www.dphe.gov.bd))<sup>3</sup>. In this thesis paper, the main emphasis is given on sanitation system and overall condition (Hygiene, toilet system .etc) of the rural areas of our country, especially in the Upazila level. And water is less discussed because it is a huge subject; it fits to be another thesis paper. The relationship between GO-NGOs in Upazila level, the functional collaboration scopes can be seen in this paper.

## **1.2 Background and Context of BRAC Sanitation Program**

BRAC started the Water, Sanitation and Hygiene (WASH) Program in the year 2006. The Government of The Netherlands, supported BRAC's WASH Program that plans to assist in achieving the target set by the Government of Bangladesh to fulfill the Millennium Development Goals. The program has two phases to execute. The first phase was completed within the period of 2006 to 2011 giving hygiene education to 38.8 million people, 1.78 millions safe drinking water coverage, and sanitation coverage up to 25.6 million people. The total duration of second phase (WASH II) was from the year 2011 to 2015. For the attainment of the Millennium Development Goals (MDGs) this program contributed a lot. It was providing integrated water services, sanitation and hygiene promotion expanding to poorly served people in collaboration with Government of Bangladesh and other stakeholders. This second phase also serves as a continuing phase of WASH I program. Since July 2012, the third phase (WASH III) began to expand its working areas in 73 new sub-districts under the BRAC DFID/AusAid Strategic Partnership Agreement (SPA).

In 2013, two (Upazilas) sub-districts among the old 150 were each split into half and two new ones were formed. As a result, the total number of program areas covered by WASH is 250 sub-districts.([www.brac.net](http://www.brac.net))<sup>4</sup>

## **1.3 BRAC's Sanitation Program**

BRAC's, WASH raises awareness on sanitation issues, which creates demand among the community for facilities such as sanitary latrines and associated hardware. In addition to reviving existing privately-owned sanitation shops, or rural sanitation centers (RSCs), new ones are being set up to increase access to sanitary latrines for communities in remote areas. BRAC's experts and the Government's Department of Public Health Engineering are also providing training on production technology and offering interest-free loans to local entrepreneurs, enabling the latter to produce quality latrine parts. BRAC's, WASH helps to

provide technical assistance to those who can afford and are willing to construct latrines, ensuring proper design and site selection. Loans are provided to those who cannot afford to pay the full cost of sanitary latrines. Two-pit latrine construction materials, including superstructures and mini water tanks, are offered to ultra poor families free of cost.

Since 2008 BRAC's, WASH has been providing two-pit latrines instead of single pit. More than 2,400 rural sanitation entrepreneurs received support from WASH. Loan support of BDT 10,000-15,000 is provided to one RSC from each union to increase access to production centers and ensure standard quality of latrine materials. BRAC is also working to converse the unhygienic latrines to sanitary latrines in its territory. Arsenic and saline-prone areas are prioritized when creating these provisions. Alternative water technologies, such as arsenic removal filters, pond sand filters and piped water supply systems are also provided in order to ensure safe water in those areas.

BRAC has huge success stories in the sanitation sector of Bangladesh. It is time to learn from BRAC by critically investigate BRAC's success. BRAC is working with the local administration and it is important to see GO-NGOs collaborations and the relations for attaining success. As BRAC has several wings in social services and the duration of this dissertation is only a few days to fulfill the M.A. in Governance and Development, I like to select the **BRAC's Sanitation Program: A Case Study** as a dissertation topic. Because I do believe that within this short time, I can get insight into the true plight of sanitation in the Upazila level. We should have a glimpse of some important information on BRAC sanitation program, which will make us understand the whole scenario more clearly.

#### **1.4 In the Words of BRAC, Its Vision, Mission, Values and Objectives:**

##### **BRAC's Vision**

A world free from all forms of exploitation and discrimination where everyone has the opportunity to realize their potential.

## **BRAC's Mission**

Our mission is to empower people and communities in situations of poverty, illiteracy, disease and social injustice. Our interventions aim to achieve large scale, positive changes through economic and social program that enable men and women to realize their potential.

## **BRAC' Values**

- **Innovation**- BRAC has been an innovator in the creation of opportunities for the poor to lift themselves out of poverty. We value creativity in program design and strive to display global leadership in ground breaking development initiatives.
- **Integrity**- We value transparency and accountability in all our professional work, with clear policies and procedures, while displaying the utmost level of honesty in our financial dealings. We hold these to be the most essential elements of our work ethic.
- **Inclusiveness**- We are committed to engaging, supporting and recognising the value of all members of society, regardless of race, religion, gender, nationality, ethnicity, age, physical or mental ability, socio-economic status and geography.
- **Effectiveness**- We value efficiency and excellence in all our work, constantly challenging ourselves to perform better, to meet and exceed program targets, and to improve and deepen the impact of our interventions.

## **Goal and Objectives of WASH I**

### **Program Goal:**

To facilitate, in partnership with the Government of Bangladesh and other stakeholders, the attainment of the MDGs goals related to water, sanitation, and hygiene for all, especially for under privileged groups, in rural Bangladesh and thereby improve the health situation of the poor and enhance equitable development.

### **(BRAC: 2004)**

#### **Specific Objectives:**

Objective 1: Provide sustainable and integrated WASH services in the rural areas of Bangladesh.

Objective 2: Induce safe hygienic behavior to break the contamination cycle of unsanitary latrines, contaminated water, and unsafe hygienic behavior.

Objective 3: Ensure sustainability and scaling-up WASH services by:

- ✚ Involving all stakeholders at all levels, irrespective of gender and social status and strengthening their capacities to effectively participate in all stages of the project.
- ✚ Facilitating the testing, adaptation and scaling up of innovative water and sanitation technologies by involving all key-stakeholders and institutions.
- ✚ Ensuring effective management that continues beyond the program period through networks and micro-credit facilities that support communities and households to maintain their WASH services, through continuing hygiene promotion/education, through technical and managerial support to institutions and staff.

### **(BRAC: 2004)**

## **Goal and Objectives of WASH II**

### **Program Goal**

To contribute to the attainment of the Millennium Development Goals (MDGs) by providing integrated water services, sanitation and hygiene promotion expanding to hard-to-reach areas and to under-served populations in collaboration with the government and other stakeholders while continuing reinforcing gains made in the original WASH I areas.

### **(BRAC: 2011)**

#### **Specific Objectives**

Objective 1: New program--To provide integrated and sustainable water, sanitation and hygiene services to underserved populations and in hard to reach areas in 20 Upazilas.

Objective2: Sustainability -- In the 150 Upazilas of the WASH I phase, to continue activities to ensure sustainability and expand toilet coverage and use to 90% from 83% of the population.

Objective 3: Capacity and empowerment- To build capacity of the communities and network with local government and other stakeholders for the implementation and sustained operation and use of installed facilities.

Objective 4: Innovation-- To contribute to the WASH sector, and the Bangladesh WASH sector in particular, by carrying out action-research on long outstanding issues such as low-cost sanitation technologies for areas with high ground water tables, safe and final disposal of human waste, and so on.

### **(BRAC: 2011)**

## **BRAC WASH Phase II October 2011–April 2015**

The second phase of the program has been funded by EKN and the Bill & Melinda Gates Foundation (BMGF), in the original 152 Upazilas and in 25 new areas. BRAC WASH II is designed to ensure sustainability and build capacity, networking and collaboration with private and non-governmental sectors. An action research element was introduced to address challenges.

## **BRAC WASH Phase III July 2012–December 2015**

Since July 2012, BRAC WASH III, funded by the BRAC Strategic Partnership Arrangement (SPA) between BRAC, DFID and AusAID, extends the program to 73 more Upazilas. The SPA maximizes opportunities for learning from BRAC programs and supports innovation and best practice. ([www.ircwash.org](http://www.ircwash.org))<sup>5</sup>

In 2013, two sub-districts among the old 150 were each split into half and two new ones were formed. As a result, the total number of program areas covered by WASH now stands at 250 sub-districts. ([www.brac.net](http://www.brac.net))<sup>6</sup>

### **1.5 Some Key Sanitation Strategies and Approaches of BRAC:**

BRAC has adopted several strategies and approaches to get the success in the sanitation sector. Financial, technical and social supports are provided by BRAC and other Government agencies in the selected areas. BRAC is also implementing its own innovation regarding sanitation in the field level. The strategies followed by BRAC have tremendous impact and influence on the working area. Some of those can be given below:

**Establishment of Rural Sanitation Centers:** BRAC's WASH has helped to establish RSCs in each union to increase access to sanitary latrine materials in remote areas. With the assistance of the Department of Public Health Engineering (DPHE) under the Bangladesh



Government, WASH provides technical training to all latrine producers in its program areas in order to support more suppliers. Till date, more than 2,400 rural sanitation entrepreneurs received support from WASH. Loan support of BDT 10,000-15,000 is provided to one RSC from each Union to increase access to production centers and ensure standard quality of latrine materials. ([www.brac.net](http://www.brac.net))<sup>7</sup>

**Loans and Grants:** The program makes provisions for families who cannot afford to pay the full price of a sanitary latrine at a time. Loans have been provided to more than 214,000 families. Furthermore, WASH has helped to mobilize access to grants from the government's Annual Development Program for around 1.3 million ultra poor families. ([www.brac.net](http://www.brac.net))<sup>8</sup> BRAC's WASH is unique in the national water and sanitation sector because it provides grants to the ultra poor for building two-pit latrines. In addition, it also provides superstructures along with the latrine materials, since it was found that when the ultra poor were provided with materials for building latrines without provisions for the superstructure, they tended not to build the latrines and instead used the materials for other purposes.

#### **Two-pit Latrines:**

Since 2008 BRAC's WASH has been providing two-pit latrines instead of single pit. The size of each pit allows it to last two years for a family of four to five. The two pits can be used in rotation; when one fills up, the other one can be used, while content of the filled up pit is digested into organic fertilizer for the next 18 months. This approach ensures good hygiene practices, along with a method for sustainable management of human waste which has been a significant issue till now.

#### **Conversion of Unhygienic Latrines to Sanitary Latrines:**

In households with unhygienic latrines, instead of entirely replacing the latrines, adding a water seal or replacing a broken one converts it into a sanitary latrine. In very simple

terms, a sanitary latrine is one that separates fecal waste from human contact. This can be achieved by means of a water seal, such as a U-shaped siphon that is partially filled with water underneath the pan, which keeps away flies, mosquitoes and odor. Water seals can be replaced at a basic price of BDT 18-20, and a slightly better version can be purchased with BDT 40-45. ([www.brac.net](http://www.brac.net))<sup>8</sup>

### **Wash in School:**

Ensuring proper sanitation in the schools in rural areas is still a challenge for us. Access to safe water and provision of proper sanitation in schools are very important. Moreover, schools are an excellent platform for hygiene education and the learning of overall proper hygiene practices, such as hand washing, drinking safe water, and using sanitary latrines. BRAC's WASH promotes hygiene education in all the schools in its program's areas. Additionally, the program helps to provide separate latrines for girls in secondary schools, since most girls reach their menstruating age during this time. For better management and maintenance of the facilities, school WASH committees and student brigades work in more than 4,900 secondary schools. The schools are encouraged to create a fund to meet water and sanitation-related expenses.

As a result, more than 5,000 secondary schools throughout Bangladesh have constructed separate toilet facilities for girls since 2008. These schools have two toilets and washbasins which were installed through a cost-sharing basis. The toilets have a bin so girls on their menstrual periods can properly dispose sanitary napkins. The washbasins have soap and the walls have posters with hygiene messages.

Teachers at these schools hold regular sessions on menstrual hygiene, which were initially conducted by the program staff. Sanitary napkins are now kept in schools in case of emergencies and girls can use them whenever necessary. They can also purchase BRAC's sanitary napkins from their teachers, at a much lower cost than the commercially branded products. Moreover, aside from the cost difference, BRAC has found that many girls are more comfortable with buying napkins from the school rather than at the market.

To ensure sustainability of the WASH facilities in these schools, school WASH committees comprised of 14 members are formed in each school, with the headmaster as chairperson and a female teacher as member secretary. In order to represent all stakeholders, members include teachers, parents, representatives from the school management committee, and the school cleaner. The committee meets on a monthly or a bimonthly basis to review activities, including latrine use and maintenance. The overall responsibility of the committee is managing, maintaining and mobilizing funds for the school's sanitation.

In addition to the school WASH committees, student brigades are established in these schools for better management and maintenance of the facilities. Each student brigade consists of 24 students, selected from class VI to IX. They receive a three-day long residential training along with their teachers. Student brigades are responsible for proper usage and maintenance of latrines as well as the overall cleanliness of the school premises. They also carry out WASH promotion activities with full participation from other students.

In order to sustain good hygiene practices, WASH conducts hygiene sessions through school teachers on a monthly basis. One male and one female teacher from each school are trained on the WASH program's issues and teaching methodology. The teachers are provided with specially designed flip charts and posters in order to educate their students on health and hygiene issues. They develop an action plan for effective implementation of and follow-up on WASH activities, and are assisted by BRAC's WASH staff when required.

Active since 2006, the BRAC's WASH program provides hygiene education and increase access to water and sanitation in 250 sub-districts of Bangladesh. It also complements efforts of the Bangladesh Government in its water and sanitation interventions.

Identifying the need for boys' latrines in schools as well, BRAC's WASH recently started providing separate latrines for boys along with pipe water systems in schools in rural areas. The program has also started working in 71 urban schools to provide safe water, sanitation and hygiene education for the poorest children in cities of Dhaka and Chittagong. (Source:wash.brac.net)<sup>9</sup>

### **Village WASH Committee:**

The village WASH committee (VWC) in each village it operates in; thus giving the community an independent role to mobilize and keep track of WASH-related changes in their area. This committee is made up of 11 members – six women and five men – representing all stakeholder groups. Each VWC conducts bimonthly meetings to assess the existing water and sanitation situation of the entire village and identify issues that need urgent action. They select sites for community water sources, collect money and monitor the latrine usage and maintenance. The committee members are responsible for identifying ultra poor households in their communities that need BRAC's assistance and grants from Bangladesh Government's Annual Development Program. The committee members are also responsible for selecting poor households which qualify for microloan support to install sanitary latrines and tube well platforms. To strengthen the capacity of VWCs, two key members from each committee (one woman and one man) are provided leadership training at a BRAC's facility. To date, more than 65,000 VWCs have been formed. Through these committees, women's empowerment is also addressed in the rural areas by recognizing women members through their voluntary contribution for the society. (Source: [wash.brac.net](http://wash.brac.net))<sup>10</sup>

### **1.6 Some Government Offices Working on Sanitation in the Upazila**

#### **Department of Public Health Engineering (DPHE)**

DPHE is the principal national agency responsible for planning, designing and implementing water supply and sanitation work throughout Bangladesh. Except Dhaka and Chittagong city areas, it is responsible for the implementation of water supply and sanitation projects in the whole country. DPHE is increasingly collaborates with private sector, NGOs, and CBOs both in rural and urban areas. Social mobilization and training were included in the DPHE activities in 1994 with the objectives of mobilizing inter-sectoral support and to strengthen community participation for sustainability and self reliance in water supply and sanitation. In addition, the introduction of 'Tara Pumps' and the 'Shallow Shrouded Tube Well', the 'Very Shallow Shrouded Tube well', 'Iron Removal

Plant' and the 'Pond Sand Filter' for salinity affected areas are major technological achievement of DPHE Research & Development Project. Now there are DPHE offices in the Upazilas and a Sub Assistant Engineer is in the charge of that particular office that is mostly responsible for the proper implementation of the sanitation program. And the Upazila DPHE Office is placed under the Upazila Parishad.

### **UNO Office under Upazila Parishad**

Upazila Parishad is a local government body, and the Upazila chairman is the chief executive of the Parishad. It has also two vice chairmen. This body is working under Local Government Division as per the law called the Upazila Parishad Act 2009. About 17 government departments are placed under Upazila Parishad. Responsibilities for all development activities at local level were transferred to the Upazila Parishads. UNOs are also placed in the Upazila Parishad. The charter of duties of UNO stipulated him to perform such functions as to: (1) act as staff officer to the elected chairman of Upazila Parishad and thus in that capacity assist the chairman in implementing all policies and decisions of the Parishad; (2) assist the Parishad/chairman in supervising all Upazila level administrative/development work and in preparing as well as coordinated Upazila development plan; (3) attend emergency duties such as relief work following natural calamities and receive food and other materials for distribution under the direction of Upazila Parishad/chairman; (4) supervise and control revenue and budget administration; (5) ensure the observance of all government directives on Upazila administration; (6) co-ordinate all Upazila level training activities; perform such other functions as what would be entrusted to him by the government or the Upazila Parishad/chairman. Therefore, it is very clear that UNO works as a very important key coordinator in the Upazila, and in the sanitation area she/he is one of the most important persons. He/she is the representative of the central government and chairman of the NGO coordination meeting. He/she works also as an Executive Magistrate. That is why his/her office is the central point of the Upazila.

### **1.7 Rationale of the Study**

BRAC is one of the largest NGOs in the world. It has huge contribution and success stories about sanitation in the field level. By sharing these success factors, it is expected that the policy makers, researchers, academics, community leaders of GO & NGOs will be benefitted a lot. The findings of this research will add value to scholars/ policy makers to review the recommendations .And apply those to local government agencies and other NGOs in the country to evaluate their effectiveness and scope to strengthen GO-NGOs collaboration. Researchers may also use the findings of this work to search out whether there is a need for any reform in current structure of NGOs, for the effective management. Furthermore, to become a middle income country by 2021, we have to give emphasis on the building of human capital, therefore, to secure sound health especially 100% sanitation coverage is very crucial now. To understand the main areas of coordination /collaboration with the local government bodies and its success factors, certainly will be necessary both for GO-NGOs and other related organizations working in the health or sanitation arena.

### **1.8 Objectives of the Study**

The objectives of this dissertation are:

- To document and highlight the success stories and actual condition of BRAC in sanitation sectors, especially in BRAC's Upazila WASH program.
- To examine the approaches, strategies along with commitment and initiatives of BRAC's WASH Project used for bringing success in the sanitation program in the Upzila area.
- To examine the extent of functional collaboration, cooperation and coordination that took place between local Upazila administration and BRAC office in the Upazila level.

### **1.9 Research Questions**

The major research question of this dissertation is:

Principal Questions:

✓ **What are the contributions of BRAC's WASH Program for improving sanitation in the Upazila level (Bholahat Upazila, Chapainawabganj)?**

To answer this major question, the following sub-questions will supplement the principal question.

**Sub Questions:**

1. What are the context and background of BRAC's WASH Program?
2. What are the types of strategies and approaches used in the program?
3. What are the major success factors in BRAC's WASH program for improving sanitation in the Upazila (Bholahat Upazila)?
4. How does Upazila (Bholahat) administration provide support to BRAC's WASH Program?
5. What are the BRAC's main success factors of sanitation in the Upazila area? What initiatives were taken to bring those successes? How the people of the Upazila were benefitted?
6. What were the major areas of coordination /cooperation between the Upazila administration and BRAC's Sanitation Program?

**1.10 Scope of the Research**

Local Government Division of Ministry of Local Government, Rural Development and Cooperatives has adopted a **"National Sanitation Strategy"** and policies to reach the target group of people for ensuring maximum success in the area of sanitation. In Bangladesh we have, the month of October as the "National Sanitation Month". It is observed in many Upzila, Zila and city corporations through a collaborative effort of the district and sub district administrations, respective city corporations, Department of Public Health Engineering (DPHE) and BRAC's WASH program with other stakeholders. We also have National Sanitation Task Force, organized by the Local Government Division, consist of stakeholders including NGOs, are working to get the maximum nationwide sanitation coverage. Some initiatives of sanitation like, Global Hand Washing Day, pure drinking water supply, and hygiene awareness- these are operated by both the government and NGOs in the national as well as in the field level. Currently, as of June 2015, the program has provided

access to hygienic latrines for 39.4 million people, safe water options for 2.3 million people, and hygiene education to an estimated 13.9 million people per year in communities and 2.9 million people per year in schools on average. Learning from BRAC is the main scope of this research. The research questions of this study will definitely unfold the crucial facts of reaching sanitation's success. ([www.brac.net](http://www.brac.net))<sup>11</sup>

So it is evident that BRAC has been contributing significantly in the sanitation sector along with the government. In my thesis, I will use secondary data to uphold my views. On the other hand, the primary data will be collected by the *interview method* and *the method of case studies* from direct stakeholders to find out the success factors as well as the collaboration scopes between the local administration and BRAC's program in the sanitation arena.

### **1.11 Limitations of the Research**

For this dissertation, Bholahat Upazila in Chapainawabganj district is selected for study. BRAC has several social activities in Bangladesh but in Upazila level, only two main aspects of sanitation program i.e. the success factors of BRAC in the Upazila sanitation and local administrative collaboration traits are selected for this thesis. Total time of dissertation is very limited. Given time is too short to cover all aspects of BRAC's sanitation program. Apart from this people of the survey area are not very comfortable talking about household sanitary issues. Somehow they are shy, and it is a limitation indeed.

### **1.12 Methodology:**

Bholahat Upazila has been selected as the study area of this research from 254 Upazilas i.e. two methods have been used for the study- one is *interview method* and another is *the case study*. The method can be discussed below:

### **Research Methods**

Research aims to help solve problems and investigate relationships of the numerous variables that exist around us. Methodology is the study of methods and deals with the philosophical assumptions underlying the research process, while a method is a specific



technique for data collection under those philosophical assumptions. Two broad methodological positions are generally discussed;

- ✚ Positivism is the epistemological position that advocates the application of methods of the natural sciences to the study of social reality.
- ✚ Interpretive assumes that social reality can only be understood through social constructions such as language, consciousness and shared meanings.

Research method is the functional action strategy to carry out the research in the light of theoretical framework and guiding research questions and /or the proposed hypotheses. Research method is therefore, a planned and systematic approach of investigation that denotes the detailed framework of the unit of analyses, data gathering techniques, sampling focus and interpretation strategy and analysis plan. (**Aminuzzaman: 1991**)

The information of the research method in my thesis is given below:

- ✚ Interview Method
- ✚ The Case Study
- ✚ Questionnaire type Structured and Closed
- ✚ Sample size 21 People (Respondents)

### **Research Design:**

This research design can be divided into two major parts:

### **Interview Method:**

In an **Interview Method**, a structured and closed form of questionnaire has been developed consisting of two parts. The first part is the 'Demographic profile' and the second part is the 'Respondent's view profile' having twenty questions. The total number of respondents is 21. Respondents have been randomly selected in respect of gender, age, income level, education, religion and so on. The questionnaire is developed in such a way that the aim of getting the exact information fulfills.

### **Case Studies:**

A case study involves an up-close, in-depth, and detailed examination of a subject (the case), as well as its related contextual conditions. A case study on the respondent (common person) was done to get in depth and detailed knowledge about the impact of WASH Program through their behavior, attitude, experience which helped to suggest some recommendations about the program. Rest of the three cases-one is taken from a public representative, another case is of a DPHE official and the last case study is on BRAC's WASH manager. These case studies will help us to get in depth knowledge about the impact of WASH program on the poor people through analyzing their view point.

### **Content Analysis:**

The data have been analyzed to find out the practical scenario of WASH Program, the benefits and the satisfaction level of the respondent, and finally to suggest some policy recommendations about the program. For better interpretation, the collected data have been presented in a tabular form. For easy understanding of the readers, sometimes data have been presented in graphical or chart form. Simple statistical tools like MS Word, Excel etc have been used to data analysis. Content analysis is used to gather secondary data which is collected from different relevant publications, dissertations, books, Journals, articles, research reports, Government publications, rules-regulations and websites to understand the functions of BRAC's sanitation sector. A literature review is done accordingly.

**Source of Data:**

Both primary and secondary data are collected. For representative data, stakeholder's direct interview and key informant's like local representative's interview has been taken by telephone. Accordingly (**annexure1**) is prepared to collect data. All primary data are collected by the author himself from key informants and beneficiaries. Content analysis was done from different documents, articles, internet relating to this study.

**Data Analysis:**

The collected data are processed and analyzed using Microsoft Word, Excel software. Statistical tools like charts, graphs, percentage, frequency etc are used to present data in a graphical presentation. Content is obtained from each participant after explaining the objective of the study, while these groups were selected to participate voluntary and random basis.

**1.13 Structure of the Thesis**

The thesis is composed of five chapters.

**Chapter One: General Introduction** –This chapter provides an introductory discussion which contains background, rationale of the study, research objective, research question, and limitation of the study, the methodology and the structure of the thesis. The goals and objectives of BRAC 's WASH sanitation program ,some important strategies and concepts of BRAC sanitation program are presented concisely .This paved the way for the basic understanding of the further coming chapters.

## **Chapter Two: Literature Review**

This chapter deals with existing literatures on the role of BRAC's sanitation program (WASH), Government journals on sanitation, reports of various development partners, and many books on sanitation. The book named ***Across the Villages, A Collection of Experiences on Water & Sanitation***, Edited by Qazi Mahbubul Hasan, NGO Forum for Drinking Water Supply and Sanitation, First published December 1997, NGO Forum for Drinking Water Supply and Sanitation. Another book called ***Impact of Different Approaches for Improvement of Sanitation Coverage in Comilla***, by A.K. Sharifullah, MD. Abdus Samad Mollah, MD. Abdul Quddus, Executed by Bangladesh Rural Development Academy (BARD), Kotbari, Comilla, Published by Director General, Bangladesh Academy for Rural Development, November, 1996, is discussed with the relevant points on sanitation in the Upazila areas. The book ***Community Health and Sanitation***, Selected and Edited by Charles Kerr, Intermediate Technology publications, 1990 and the book named ***Sanitation Strategies and Technologies, Flood-prone and High Water Table Areas of Bangladesh***, principal investigator: Dr.Noor M.Kazi, reviewers: Dr.MD.Mujibur Rahman, Dr.M.Feroze Ahmed, Mr.Abu Jafar Shamsuddin, these two literary pieces are also discussed in this chapter. The next book covered is ***Total Sanitation: A community Stake***, Helal Mohiuddin, PhD, Md.Ayub Ali Edited by: Joseph Halder, First published December 2005, published by NGO Forum for Drinking Water Supply & Sanitation, printed by: S.N. Printers. The above mentioned books along with various websites both national and international have helped to construct the contents of the chapter two.

## **Chapter Three: Overview and Strategies**

In this chapter, the overview and the concepts of the theories used in this study are discussed elaborately. The strategies, approaches and success factors which are influencing BRAC's WASH program, general information of the selected area, the baseline survey, the analysis of theories, practices and facts are discussed to get the findings of the thesis.

#### **Chapter Four: Findings and Analysis**

The chapter analyzes the methodology applied for collecting and processing data. It elaborates research methods and techniques used for data collection and analysis. Primary data have been collected by using questionnaire of twenty one people from Bholahat Upazila of Chapainawabganj district. Questionnaire covers both open and close ended questions. Other relevant data are collected from secondary sources for proper analysis. The case study method is used in the thesis paper, case study no 01 is on *Rubina Begum, a beneficiary* and case study no 2, *Royeda Begum* is the public representative (Women member of Doldoli Union Parishad ) ,case study no 3 is on Md. Sirajul Islam, Upazila Manager ,BRAC (WASH) program, Bholahat and the 4<sup>th</sup> case study is on Mr. Shahinul Hoque ,Sub Assistant Engineer, Department of Public Health, Bholahat Upazila. Secondary data are collected from official documents, books, published articles; workshops, seminar papers, Journals, newspaper articles, reports published from different national and international organizations and websites. The fourth chapter is the most important one of this paper. Here data collected from the respondents and secondary sources have been analyzed and arranged in chart, bar or other graphical form by using Microsoft Words, Excels software and other methods. This is helpful to explain different findings and subsequent analyses of the study.

**Chapter Five: Conclusion and Further Scope of Study**--This chapter discusses data collected from the study areas on what role BRAC's strategies and approaches are playing in the selected area .The chapter upholds the major areas of collaboration, cooperation and coordination between Upazila administration and BRAC's WASH Program. And above all the effectiveness and usefulness of the WASH in Bholahat Upazila. Based on data analysis and discussion in previous chapters, this chapter recommends ideas for future approaches and some measures to be taken for further improvement in BRAC's sanitation program as well as the Government agencies' effective roles in ensuring sanitation for all. In fact, in this concluding chapter of the thesis, the findings, the learnings and the recommendations for betterment are presented with a conclusion. At last, the further scope for studies is given elaborately.

## Chapter 2

### Literature Review

#### 2.1 Introduction

Many people of Bangladesh were not aware enough about safe drinking water and sanitation related issues, even a few decades ago. People of the rural areas usually used ponds, rivers or canals and some of them use tube well water for their drinking purpose and other usage. A lot of people had no conception about sanitary latrines at that time. After the independence of Bangladesh, the government has been trying to upgrade the situation by adopting different policies and strategies on safe drinking water, sanitation and hygiene to develop the human resources. Government has also deployed different institutions like DPHE, WASA, LGD etc, related to safe drinking water and sanitation. Many NGOs are also working in this sanitation sector. Among these, BRAC's involvement has added a new dimension and considered as a unique one. The effective collaboration of GO and NGOs can help to improve the health condition of the poor people by ensuring safe drinking water and basic sanitation facilities. In this chapter, some literature of national and international levels are cited specially focusing on the sanitation strategy, policies, technological aspects and various experiences and learning on sanitation in the rural areas of Bangladesh. And BRAC's role in the overall sanitation coverage and its success factors are compared and contrasted from this literature review, which will ultimately lead us to a better understanding of the overall study.

Before we go to the literature review of the books, we should discuss very briefly the context of sanitation in Bangladesh, WASH program's analytical frame works, the goals and objectives of WASH ,the various development partners, some policies and strategies, some institutions and NGOs relating to water and sanitation program .

## **2.2 Water and Sanitation Context in Bangladesh**

Bangladesh has made noteworthy progress in the field of sanitation and hygiene sector. In the year 1983, about only 1% of the population had access to sanitary latrines. With considerable national efforts, this number had risen to 33% in 2003, even surpassing neighboring countries such as India. Comparatively Bangladesh is ahead of many south Asian countries. However, a major effort was still required to achieve the targets set for sanitation in the Millennium Development Goals, and the more ambitious national goals that seek to achieve 100% sanitation by 2010. In Bangladesh, 55 percent of the population uses hygienic sanitation facilities, and 83 percent has access to safe drinking water (Progress on Sanitation and Drinking Water Update .World Health Organization and UNICEF,2013).In adopting the MDGs ,Bangladesh pledged to reduce the proportion of people without access of safe drinking water and basic sanitation by half within the given time .BRAC's WASH program ,a member of national sanitation taskforce ,is undertaking the largest project which supports the Government's commitment to ending open defecation.

Now Bangladesh faces multiple challenges that make it difficult to ensure basic services to its citizens. In the water, hygiene and sanitation sector, these challenges include: reaching the poorest people, inconsistent hygiene practices, water quality, issues related to quantity (flooding, drought, and water management), improving sanitation technologies for the poor who live in remote and hard to reach areas. The institutional setting is complex for addressing these issues. Capacity and management skills need to be improved, particularly at the intermediate level that links to the Union and community. The government has had limited success in targeting the poor and the hardcore poor—those with little or no disposable income. It has also proved difficult to ensure the sustainability of the provided water and sanitation services. However, the government has recognized some of the inherent program weaknesses and has invited NGOs to support its efforts to attain the MDGs targets on sanitation and water. Similar to many other developing countries,

Bangladesh lacks sufficient financial resources and capacity to implement its policies. Spending on the water and sanitation sector has been low: less than 2% of the total budget is devoted to the sector. Thus, external donors and the private sector account for the majority of the spending in the water and sanitation sector.

**Source : (BRAC: 2015)**

### **2.3 BRAC (WASH) Program**

BRAC, one of the largest NGO's in the world. Currently, BRAC undertakes its program and activities through 32,652 full-time staff and 65,412 part-time school teachers. Its development interventions are extended to 4.86 million households in over 65,000 (out of total of 86,000 villages in Bangladesh) and 4,378 urban slums in all the 64 districts of Bangladesh. BRAC, from the very beginning, has brought an exceptionally strong and consistent dedication to improving the lives, the position and to empowering women and poor families. It implements three major programs, which are especially geared towards women and the poor: Rural Development, Non Formal Primary Education, Health and Nutrition. 95% of the members in BRAC's programs are women and 70% of the children in BRAC schools are girls. The goal of the proposed program is to ensure that 17.6 million people—spread over 150 Upazilas - have access to sanitation services that are effectively used, including consistent hygiene practices. In addition to this, more than 8.5 million people will be provided with safe water supply services. This program will ensure that existing water supplies are sustained, well maintained and managed by the community.

To achieve the goal, the following three objectives have been defined:

- 🚩 Objectives 1: Provide sustainable and integrated WASH services in the rural areas of Bangladesh.



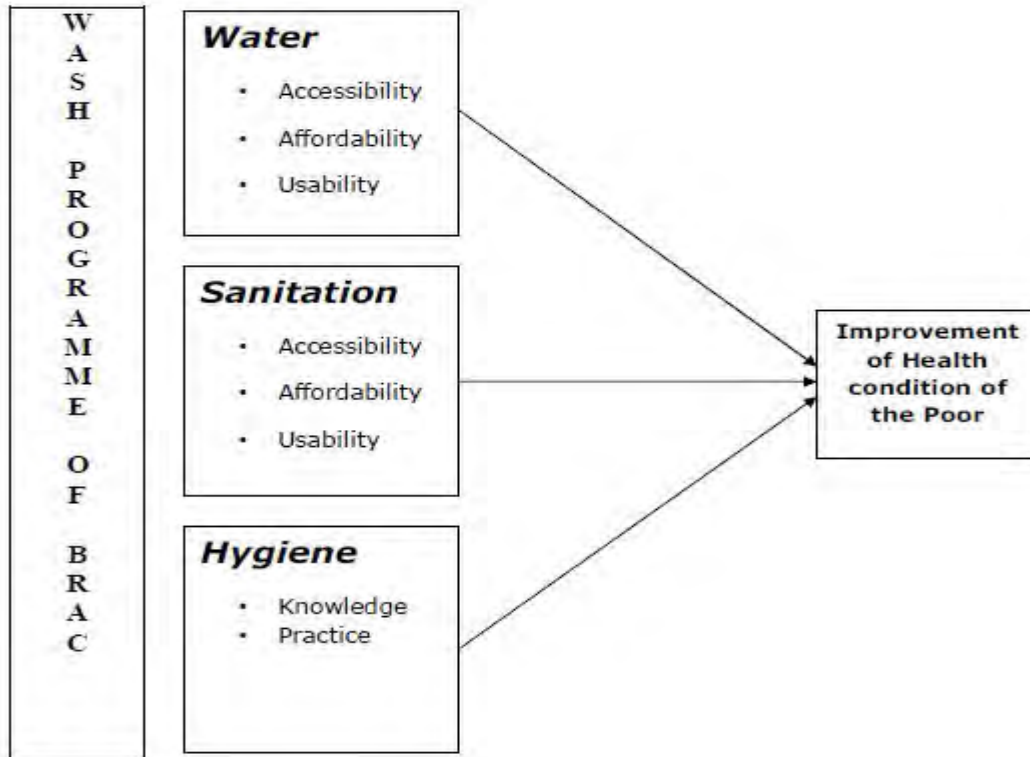
✚ Objective 2: Induce safe hygienic behavior to break the contamination cycle of unsanitary latrines, contaminated water, and unsafe hygienic behavior.

✚ Objective 3: Ensure sustainability and scaling-up WASH services.

The aim of WASH Program of BRAC is to ensure people's access to or enable them to afford to get the benefit of safe drinking water and use of sanitary latrine. Hygiene knowledge as well as hygiene practice is important for better health status. Many poor people of our country are usually deprived of getting safe drinking water and sanitation facilities due to many impediments and problems that can be expressed by three Indicators. These are:

- Accessibility
- Affordability and,
- Usability

Accessibility or affordability is a must for getting the facilities. Usability is another important indicator by which facilities can be utilized to convert into benefit. So to get benefit from any facilities, a person must know the art of using/ utilizing that facility. The analytical frame of BRAC's sanitation program (WASH) is given below with its various components.



**Figure No: 1** Analytical framework of WASH Program of BRAC

Source: (Mollah M.M:2013)

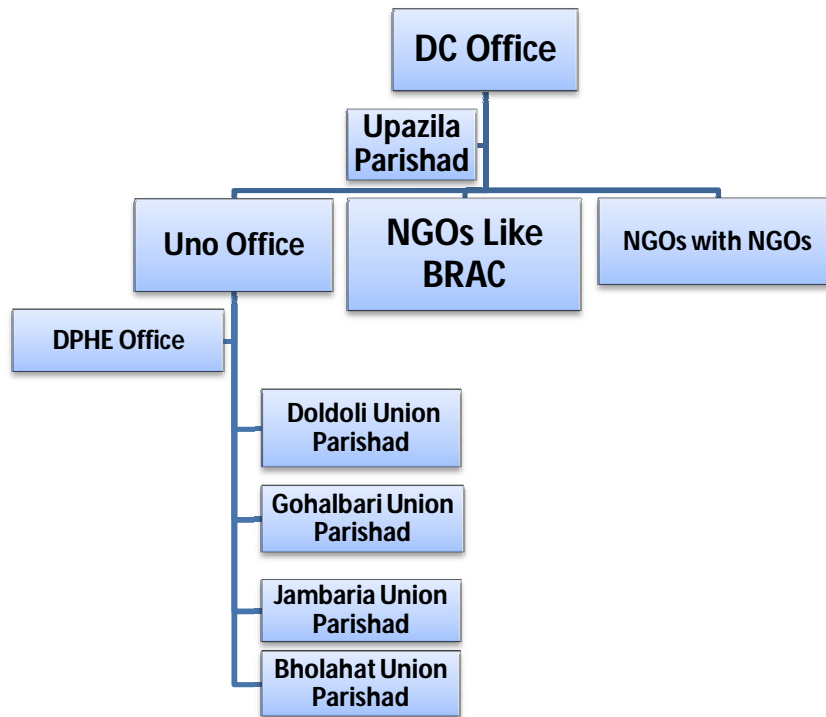
Furthermore, it is noted that central in the overall strategy is the participation and collaboration at the Union and the village level where improved hygiene practices will be the backbone of the program supported by improved sanitation and safe water supplies. The micro-strategy, described in detail later, is to stimulate bottom-up participation and planning through purpose-organized WASH committees at the village level whose members represent the entire village (and particularly the poor and women), including other committees and other agencies or NGOs that may be active in the village. In the Union Level, BRAC will pro-actively provide support to and collaborate with the Union WASH committees.

It can be said without any doubt that this is an innovative learning program. It contains a preparation phase of 6 months followed by a start-up period of 1½ years. During this initial

2-years period, there will be action research and experimental or comparative trials on issues such as the most effective ways to reach the very poorest families with an integrated package, trials/research into varied design/technologies for piped water, improved latrine technology, and certain essential software aspects such as working with Union government, integrating water-sanitation-hygiene in the most effective way, community management of piped water, working effectively with other institutions.

#### **2.4 The Analytical Framework of Coordination between BRAC and Local Administration:**

The coordination takes place firstly from the office of the Deputy Commissioner. The D.C. is the main coordinator of the district, to achieve the sanitation coverage, his role is very important. In Upazila level, Upazila Parishad does the work of sanitation and Upazila chairman and UNO of that particular area are the central figures of all development activities. However, Upazila Nirbahi Officer is the chairperson of NGOs coordination meeting; he is the monitoring and supervising authority. Both UNO office and DPHE office are the government agents of covering 100% sanitation in the particular Upazila. The main coordination occurs from UNO office, NGOs and DPHE offices. These three Offices are vital for all kind of sanitation activities. The targets of sanitation coverage, the loopholes, the problem and prospects ,strategies—all of these are discussed in the Sanitation Meeting, where the Union level stake holders remain present .Local DPHE office organizes this sort of meeting, and of course, local NGOs take part. The sound understanding among the NGOs, Government Offices in the Upazila is a must for getting success. The government allotments mainly comes at DPHE office, the distributions of the sanitary goods are done under the shed of the Upazila Parishad. In the various program relating sanitation, the participation of local UNO, Upazila chairman, MPs are required. This coordination is crucial. The diagram below shows that Bholahat Upazila the coordination/collaboration of BRAC's WASH with other offices. It topples down to the Union level.



**Figure No: 2 Coordination Patterns of BRAC and Other Offices in the Upazila**

## 2.5 Some Policies and Strategies

- ✚ In 1998, the Government of Bangladesh adopted a comprehensive National Policy for Safe Water Supply and Sanitation (NWSS Policy) to achieve that all people have access to safe water and sanitation services at an affordable cost. 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 objectives.
- ✚ The National Water Policy, promulgated in 1999, provides policy direction for the entire water sector. The goal of the National Water Policy is to address issues related to the harnessing and development of all forms of surface water and groundwater and management of these resources in an efficient and equitable

manner. Other related policies such as the National Arsenic Mitigation Policy and the Pro-poor Strategy for Water and Sanitation were enacted in 2005.

- ✚ In line with the National Water Policy, the National Water Resources Council approved the National Water Management Plan (NWMP) in 2004. The NWMP has been prepared envisaging, inter alia, access to appropriate sanitation to all by 2010 and has also made a provision for household waterborne sanitation and storm water drainage in major cities.
- ✚ A national sanitation program has been launched in 2003 and a Country Strategy Paper for Community Led Total Sanitation has been developed for coordinated efforts from the stakeholders.
- ✚ The National Sanitation Strategy was approved in 2005 to delineate the ways and means of achieving 100% sanitation for all by 2010 through providing a uniform guideline. Recognizing the challenges faced by the sector, the government has revised its national sanitation target of achieving full coverage by the year 2013.
- ✚ The 2005 National Strategy for Accelerated Poverty Reduction, popularly known as Poverty Reduction Strategy Paper (PRSP), and the revised PRSP-II for 2009-2011 underscores the special needs for the water supply and sanitation sector. The PRSP therefore creates a legal and administrative basis for the government to mobilize and spend resources for the sector.

## **2.6 Development Partners of WASH Program**

WASH1 was funded by the Netherlands Ministry of foreign Affairs, Development Cooperation (DGIS).

WASH2 is jointly funded by the Embassy of the kingdom of The Netherlands and the Bill and Melinda Gates Foundation.

WASH3 by UKAID under BRAC's Strategic Partnership Arrangement with an implementation plan in an additional 73 sub-districts by 2015.

Charity water is supporting to establish water supply in 250 schools along with sanitation in 60 schools for both girls and boys by 2015.

SPLASH is collaborating to ensure safe drinking water and hygiene promotion in 71 urban schools by 2015.

**Source : (BRAC: 2015)**

## **2.7 Institutions Working on Sanitation**

**The Ministry of Water Resources (MoWR)** is Bangladesh's apex body for development and management of water resources of the country. It formulates policies, plans, strategies, guidelines, instructions and acts, rules, regulations, etc. relating to the development and management of water resources, and regulation and control of the institutions reporting to it. (Website: [www.mowr.gov.bd](http://www.mowr.gov.bd))

**The National Water Resources Council (NWRC)** coordinates all water resources management activities in the country, and particularly provides main policy guidelines and directions for optimal development and utilization of water resources.

**The Water Resources Planning Organization (WARPO)**, an institution under the Ministry of Water Resources, is a key organization of the government dealing with nationwide water resources planning and management, such as updating the National Water Management Plan. (Website: [www.warpo.gov.bd](http://www.warpo.gov.bd))

The statutory responsibility for the sanitation sector is vested in the **Local Government Division** under the **Ministry of Local Government, Rural Development and**

**Cooperatives (MoLGRDC)**, (Website: [www.lgd.gov.bd](http://www.lgd.gov.bd)) which shares with the **Ministry of Planning and the Ministry of Finance (MoF)** the tasks of policy decisions, sectoral allocation and funding, as well as project appraisals, approval, evaluation and monitoring. (Website: [www.mof.gov.bd](http://www.mof.gov.bd))

**The Department of Public Health and Engineering (DPHE)** (Website: [www.dphe.gov.bd](http://www.dphe.gov.bd)) under the MoLGRDC is responsible for providing water and sanitation services in rural and urban areas. Only in the cities of Dhaka and Chittagong, water and sewerage (Dhaka only) are handled by Water Supply and Sewerage Authorities (WASAs). However, apart from these agencies efforts, the Government of Bangladesh hosted SACOSAN (South Asian Conference on Sanitation), 2003 in October in order to (i) assess the state of Sanitation & Hygiene, sharing experience and lessons learnt in the region (ii) raise the profile of Sanitation & Hygiene in South Asia (iii) generate political commitment through a joint declaration and (iv) strengthen leadership/advocacy for improved sanitation & hygiene in South Asia.

Local Government Division of Ministry of Local Government, Rural Development and Cooperatives have adopted a “**National Sanitation Strategy**” to reach the target.

## **2.8 NGOs Relating to Water and Sanitation Program:**

With BRAC, the robust NGO sector in Bangladesh has many institutions- large and small- of both national and international origin- which work in the water and sanitation areas. Some selections from these are noted here, as examples of approaches and activities which might provide useful insights or services for the proposed program:

### **CARE**

CARE has in the SAFE and later, the SAFER Project, worked to integrate water supply, sanitation with a dominant hygiene promotion/ education component focused on the household. Its project carried out in two districts with small partner NGOs, has involved

action research and detailed monitoring on selected hygiene and sanitation behaviors such as hand washing. This approach and the book that has been prepared about it may provide useful insights into a strategy of behavioral change. (Website: [www.carebangladesh.org](http://www.carebangladesh.org))

### **Water Aid Bangladesh**

Water Aid is a leading independent organization that enables the world's poorest people to gain access to safe water, sanitation and hygiene education. Water Aid has been in Bangladesh since 1986, working with 21 local partners to improve access to water supply and sanitation services for poor communities. It is currently working with Bangladesh Government to build the National Sanitation Strategy, which would help them to reach universal access to sanitation by 2015. (Website: [www.wateraid.org/bd](http://www.wateraid.org/bd))

### **ICDDR-B**

It means 'International Centre for Diarrheal Disease Research- Bangladesh'. This internationally- known research and training institute has supported or collaborated in fundamental research related to arsenic contamination and its consequences since 2001. It also collaborates in basic impact research with BRAC. (Website: [www.icddrb.org](http://www.icddrb.org))

### **PROSHIKA**

PROSHIKA has initiated 25913 hand tube wells 414106 sanitary latrines. It has established 487 latrine production supports with RFL credit support. It has tested 15084 tube wells for arsenic as a consequence of emergency of the arsenic problem scaled down its hand tube well project. (Website: [www.proshika.org](http://www.proshika.org))



## VERC

The Village Education Resource Centre (VERC) has been working on WATSAN since its inception in 1977. It is working in six districts in providing technology support for latrine and water point installation and hygiene education for behavioral change. It has developed nine models of latrine. VERC follows a participatory approach to 100% sanitation. (Website: [www.vercbd.org](http://www.vercbd.org)).

## NGO Forum:

It is an apex organization working exclusively in water and sanitation sector in partnership with local NGOs. It covers 10894 villages in all districts of the country. The core communication package of NGO forum is shared with all NGOs working in water supply, sanitation and health promotion including BRAC. (Website: [www.ngof.org](http://www.ngof.org))

**(BRAC: 2011)**

**2.9 Books Reviewed: Some books are reviewed below where the chapters are analyzed dealing with sanitation issues:**

**Title of the Book: Across the Villages, A Collection of Experiences on Water & Sanitation,** Edited by Qazi Mahbubul Hasan, NGO Forum for Drinking Water Supply and Sanitation, First published December 1997, NGO Forum for Drinking Water Supply and Sanitation.

**Chapter on *Training women is the Key* (page 17-18),** depicts the picture of training as a strategy and here NGO Forum have been seen to engage in production and sale of hygienic latrines and work zealously among the villagers to use hygienic latrines and safe water from tubewells installed in backward areas of Khulna, Satkhira and Bagerhat. Members of the partner organization have acquired a high standard of training and the knowledge of making the

ring –slabs and tubewell installation from NGO Forum. They work for raising awareness in womenfolk and children about the hygienic latrines importance of using tubewell water, holding group meeting in the country yard homesteads. Female beneficiaries having training from NGO forums are engaged in transpiring Watsan program among the fellow women and children of their respective areas. In this chapter, the local social leaders said that women workers are more effective than male ones in promoting Watsan program in the working areas. ***Importance of Imams in Changing Habits***, (page, 19), speaks about the success of sanitation, the dwellers of Hasadanga, a remote village in Keshabpur Thana proudly say that most of the houses in their village have hygienic latrines and all people of the village use safe water. When asked how it was possible, the villagers said that the Imams (religious leaders) of the mosques pioneered the message of maintaining good health by using hygienic latrines and safe water. Mobarak, one of the 30 Imams who attended the course on *'Role of Imams in the Use of Safe Water and Hygienic Latrine'* started motivating people in his areas on the use of safe water and hygienic latrines for maintaining health and healthy environment. The Islamic Foundation regularly organizes 'Imam Training program' in the divisional towns. In every program, NGO Forum gives presentation on Watsan program highlighting the necessity of using safe water and hygienic latrines with the call to imams to imbibe people with the knowledge of getting used to those. The video films on Watson program have been found very useful to educate the Imams and the common people.

The chapter named ***Training Helps More than One Ways***, (page 23-26), shows that TOT program came to them as blessings. In the chapter, ***The Member Made It Successful***, here, a Union Parishad Member, uses some young men for social *Mobilization for Sanitation*, they tried to convince the people by upholding the importance of hygienic latrines as well as disadvantages of open /hanging latrine use. He discloses that it was very effective initiative to form different committees who ultimately help the proper implementation in many ways. The Member recommended that the project should be implemented long-term basis appointing enough staff members. The latrine should be distributed at reduced price and on installment basis specially among the poor people. He further said that teaching the people following the

flip chart was excellent method for motivating the people. He also opined that miking, poster, school program, country yard meeting etc, should be facilitated more in number. Different committees comprising of the GO, NGOs and the community people should be formed and responsibilities should be distributed very specially among those. He also says that continuous follow-up can motivate the people in hygienic Watsan habit.

In the chapter named ***Integrated Move Works Best***, (page 31), shows that the dedicated workers of ROVA (Rural Organization for Voluntary Activities), a partner organization of NGO Forum has made the success story by integrated approaches towards carrying Watson program. The courtyard meeting, local discussion forum and group discourses as three devices designed to prepare the rural community for responding to the fundamental approaches of the Watson program. ***Coordination yields*** chapter speaks about the importance of better co-ordination among organization, no matter GO or NGOs, is a must for faster results as far as development in Watson sector is concerned. NGOs working with Watsan program weave a network of coordination among themselves as well as with other organizations working for the same cause over the period of time as they all slowly move through path of adherence. Role of NGOF itself has a far-reaching effect on NGOs working in this field as far as coordination among them is concerned. They all mention it very strongly that NGOF as a pro-active catalyst does provide supports not only to the term of hardware and software support but, in the terms of inter-agency and trans-sectoral collaboration also. It provides training facilities, gives scope to its partners to share each other's experience by organizing different program, organizes exchange visit, promoting role of civil society for Watsan promotion, etc. All these activities help the partner NGOs collaborate at the local level and thus synergistic effect of the Watsan program comes.

***Impact of Different Approaches for Improvement of Sanitation Coverage in Comilla:***  
A.K. Sharifullah, MD. Abdus Samad Mollah, MD. Abdul Quddus, Executed by Bangladesh Rural Development Academy (BARD), Kotbari, Comilla, Published by Director General, Bangladesh Academy for Rural Development, November, 1996. In Chapter 2, ***Salient Features of Different Approaches Followed in Social Mobilization program for Improvement Sanitation Coverage*** in the study area. Here, three agencies were involved

in the social mobilization Program for Improvement Sanitation situation in Comilla. The involved agencies were Comilla District Administration, Kotwali Thana Central Co-operative Association (KTCCA) Limited and a local NGO called Poverty Alleviation, Gender Equality and Environment Development Centre. The role of district administration is to maintain law and order situation in the district along with performing co-ordination role among the different Government and Non-Government Organizations for enhancing the development activities in the area. The main feature of the approach followed by the district administration is the implementation of the program and to raise the sanitary latrine coverage in the district. The overall responsibility of organization and implementing of the program was handed over to respective Thana Nirbahi Officer (TNO's), DPHE representatives along with fixed financial allocation for each Thana (now Upazila).

The title naming, ***Involvement of Public Representatives and DPHE Wing at the Thana Level.*** ( Page-19), The representative TNO at the Thana level organized a joint meeting with participation of Union Parishad chairmen, the government departmental officials and the representatives from the NGOs. The meeting discussed thoroughly about sanitation implementation procedure of the program in motivating the villagers about sanitation activities particularly use of the sanitary latrine, use of safe drinking water and to follow other sanitation practices in their day to day life. The UP chairmen were given active role in motivational activities and overall responsibility was given to the Thana Public Health Officer. Some departmental officials were also involved in the successful implementation of the motivational program at the Union and village level. The book has the chapter named

**Implementation of Appropriate Motivational Activities:** (Page-19), the main features of Motivational Activities were as followed:

- ✓ Organization of one mass rally at the Thana centre with participation of all levels of people highlighting the need for sanitation practices in day to day activities through demonstration of some visual aids (posters, leaflets, banners, sanitary latrine ,safe water and use of soap/ash after defecation and before taking meal).

- ✓ Organization of Union level, ward level and village level meetings/orientation program for awareness buildings of the villagers.
- ✓ Distribution of leaflet (covering different aspects of sanitation activities) among the villagers and hanging of posters in public demonstration places.
- ✓ Miking at the village market and village level about use of sanitary latrines.
- ✓ Organization of meeting at school, college, madrasa and other religious institute.

All these above mentioned activities were implemented under the direct supervision of Sub-Assistant Engineer, DPHE with the presence of some departmental officials in few cases.

**The Paragraph on Orientation of the Field Workers:** The field level workers in the area namely inspectors, supervisors and Village Health Workers of the cooperative societies were given responsibility about the importance and method of implementation of sanitation movement to aware the villagers about the sanitary latrine installation. They were given detailed training about the methodology to be adopted for motivational activities, installation and use of sanitary latrines and other practices.

**The Paragraph on Involvement of Primary Village Co-operative Societies (page-22)**

In each of the primary cooperatives societies there were trained VHWs and they were given responsibilities of motivating the villagers about the installation of sanitary latrines and adaptation of other sanitation practices. The VHWs of the primary societies met all the household heads of the village in rotation and explained the importance of the sanitation activities with necessary technical advice and guidance in sanitary latrine installation. The weekly meetings of the societies were also used as a learning forum and motivation of the villagers regularly for purpose.

## **Continuous Supervision and Monitoring**

Advisory Committee and a Program Coordinator were also appointed to run the field activities smoothly under regular guidance by the advisory committee.

## **Orientation of the Staff Members**

A day long orientation program was organized in the main office the centre for the area managers and senior staff members of the center with participation of NGOs and DPHE representatives. Senior staff members and area managers were given detailed idea about the importance, methodologies and other aspects of the mobilization program for successful implementation at the field level.

The area managers in turn provided training to their field staff about the detailed methodology of the program to be followed in social mobilization activity for awareness building of the villagers and increase in sanitary latrine coverage in area with necessary help from Thana public health office.

## **Implementation of Appropriate Field Activity:**

Different types of activities were performed at different levels to motivate all levels of population in area and they are:

- ***Holding of union level meeting:*** They organized union level meeting with participation of the Union Parishad chairmen, members, social and religious leaders at all the unions of the Thana.
- ***Holding ward level meeting:*** Ward level meeting were organized with participation of respective ward members, local leaders and villagers as motivational forum.
- ***Organizational of gatha baithak (group Meeting):*** Organized gatha baithak a village level meetings with participation of different levels of villagers. Importance of sanitary latrine use, of pure water ,hand wash with soap/ash after defecation and before taking meal were the main areas of discussion in the meeting.

Meetings at schools, religious institutions and social institutions were also organized to aware respective community of Thana about importance of sanitation activity and dissemination of ideas among the villagers through those community leaders.

- **Organization of Rally:** A rally is also organized at the Thana level with participation of different sections of population of Thana in collaboration of Thana administration. Importance of sanitary activity in all aspects of life was the main issue in public discussion in the rally. Importance of sanitation activities was also highlighted through different visual aids.
- **Mass Propaganda:** Miking at local hats, bazaars and other local assemblies were also done to motivate the people along with distribution of leaflets and posters.

### **Effectiveness of the Approaches Followed in Mobilization Program**

Three agencies involved in the mobilization program, those are district administration, local NGOs and local administration devoted themselves seriously in successful implementation of the program for awareness building in sanitation practices and to fulfill the desired target of sanitation coverage in the district. The approaches followed by the representative agencies were mostly similar in nature with some exception in respect of organizational structure and nature of activities of the agencies.

District administration used their administrative hierarchy from district to Thana levels and involved the local public representatives in the motivational activities with main responsibilities entrusted upon the Thana Public Health Engineer Office. Other nation building department officials were also invited to participate in the process and some of them were given few local responsibilities in the proper implementation of mobilization activities. But because of their departmental responsibility and lack of coordination at the Thana level, the government officials were not able to participate to the expected level. Local public representatives were also found not so much interested in social mobilization activities as they were more interested in implementation of other development activities. The Thana Public Health Engineering office was found to bear the major load of implementation of the social mobilization program along with their other departmental responsibilities.

## **Concluding Portion of the Book**

Among the different motivational approaches as followed by different institutions, contact at the household level through trained field workers of rural institutions (co-operatives, informal groups), was found to be most effective in motivating villagers within short time. The other successful approaches were meeting with the villagers at different levels (village, ward, union, Thana) meeting with the personnel of the local institutions (school, madrasa, mosque, club etc.) and adoption of some other visual and hearing aids (making, posters, rally). But only motivational activity was not sufficient to increase the coverage of sanitary latrine at the desired level. It needs establishment of quality sanitary latrine hardware supply center at reasonable distance from the villager with some other assistance for the poor villagers.(Financial and technical)

## **Recommendations Found in the Book**

The following issues were suggested for consideration in successful implementation of future sanitary program:

- ✓ Sanitary latrine hardware distribution/sales centers might be established at a reasonable distance from the villagers (say at ward/union/village cooperative level).
- ✓ The quality of sanitary hardware materials should be improved and price to be maintained within purchasing power of the poor villagers.
- ✓ Village level institutions might be used as effective institutions for dissemination of motivational information among the villagers most effectively.
- ✓ Further orientation and training to be provided at the village level on proper use and maintenance of sanitary latrines for sustainability of the program.
- ✓ Interest fee, loan and technical support have to be provided to the poor village community for adaptation of sanitary latrines at their levels.
- ✓ For awareness building and motivation of the rural population; house to house approach with trained VHWs, miking in rural hats and bazars, distribution of



leaflets, hanging of posters in public demonstration places and Television and Radio media should be more extensively utilized.

- ✓ For increasing sanitary latrine coverage only motivational activity was not enough. It also needs establishment of proper distribution network within the reach of the rural population for supplying of quality sanitary latrine components along with continuous motivational activity.

**Source :( BARD: 1996)**

Now we shall discuss the book titled as *Community Health and Sanitation*, Selected and edited by Charles Kerr, Intermediate Technology Publication Ltd, Intermediate Technology publications, 1990.

This is a volume of articles on water and sanitation, has 11 Chapters. The first Chapter establishes the theme that improved sanitation and hygiene, as well as improved water supply, are necessary to achieve health benefit, and examine the methods to ensure the successful projects. Chapter 2 shows that how difficult it is to measure health benefits and gives examples of water health hazards and their controls. The next three chapters deal with measures to make water supply safer; in the home and for community, and in particular through water quality control. Chapters 6 and 7 deal with sanitation; latrines in former, and other aspects in the latter, including waste disposal and drainage. Training is covered in Chapter 8 and the related community education and participation program (CPE) in Chapter nine. Chapter 10 is directed to examples of program planning, while Chapter 11 stresses the need for strategies for improvement. In the above mentioned book, Chapter 1, Water and Sanitation, says that health benefits cannot be achieved to any great extent through improved water supply alone; improved sanitation must be implemented simultaneously. Even then, health benefits will only result with proper hygiene, and this demands education. Hence the equation is:

## ***Health=Water+ Sanitation+ Hygiene Education***

**The main points of the WHO/UNICEF recommendations are found in this chapter of the book:**

- Water supply and sanitation should be regarded as integrated components of primary health care and community development.
- In order to combat diseases caused by contaminated water or related to inadequate water supply and sanitation more effectively, the installation of sanitary excreta disposal facilities should be encouraged, with measures taken to dispose of waste and improve personal food hygiene.
- Most important, it should be ensured that the communities and the individuals within them are not only fully aware of the relationships between water, sanitation, hygiene and health, but also that they are motivated and given the facilities and assistance to participate in all stages of improving their own living conditions .In other words, work must be intensified in providing encouragement to the communities to organize.

A different thing is dealt in chapter titled, Health Aspects, (Chapter 2) Health aspects of water and sanitation, by Sandy Cairncross, in the book ***Community Health and Sanitation*** says that:

Many infections can be accurately described as water borne diseases, where the pathogenic organisms are carried passively in water supplies, and they are prevented by giving attention to water quality-this is the first category.

There is another important group of diseases, however, which may be called water washed infections as they result from lack of water for washing or personal hygiene. Clearly their prevention depends on the availability, access to, and quantity of domestic water supply rather than on its quality.

**These two groups are shown as categories 1 and 2**

**Table no: 01 Diseases category, examples and relevant improvement**

Category	Examples	Relevant improvement	Water
<b>1. Water-borne infections</b>	Typhoid, Cholera	Microbiological sterility	
<b>a. Classical</b>	Infectious hepatitis	Microbiological	
<b>b. Non-classical</b>		Improvement	
<b>2. Water-washed infections</b>	Scabies, trachoma	Greater volume available	
<b>a. Skin and eyes</b>	Bacillary dysentery		
<b>b. Diarrhoeal diseases</b>			
<b>3. Water-based infections</b>	Schistosomiasis	Protection of user	
<b>Penetrating skin</b>	Guinea worm	Protection of source	
<b>Ingested Infections with water related insect vectors:</b>			
<b>a. Biting near water</b>	Sleeping sickness	Water pipe from source	
<b>b. Breeding in water</b>	Yellow fever	Water pipe to site of use	
<b>Infections primarily of defective sanitation</b>	Hookworm	Sanitary fecal disposal	

(Source: Kerr, 1990)

## **The Role of Software**

Although many engineers and scientists are most concerned about the construction of the latrines and risks of pollutions, the really important consideration in providing rural sanitation are those described as 'software'. Motivation of individual house holders and communities must be very high on the list of priorities .To achieve this there is often a need for education. Sorting out financial aspects (where all the cost is covered by beneficiaries or support is provided by the governments or donors) is vitally important. So it is the training of artisans, or the householders themselves, so that latrines are made in the best possible way to suit the local requirements.

Throughout the developing world there is ample evidence that rural sanitation can be improved where:

- ❖ There is determined leaderships.
- ❖ Local individuals and communities are aware of the benefits of improved sanitation, and are fully involved in every stage of the program.
- ❖ The types of sanitation offered are appropriate for local customs and can be provided with the resources available.
- ❖ Training is provided in appropriate construction techniques.

## **Importance of Health Education**

Health has to improve because of the improved sanitation; it is just as important for rural people to appreciate the dangers arising from excreta as it is for them to have good latrines. It is rightly often said that there are three equal elements for improving environmental health; safe drinking water, good sanitation and education. These three facts cannot be separated. Often drinking water becomes unsafe because of poor sanitation .Health education, an understanding of transmission of diseases from excreta, can lead to a demand for good latrines. Equally, where good latrines have been provided without adequate health education or community involvement, there can be followed such a degree of non-use or misuse that benefits are completely undermined.

From ancient times, people have practiced simple sanitation by covering their feces with soil. There is some truth in old age that 'out of sight is out of mind.' However, a shallow covering of earth is insufficient to prevent the spread of diseases. The larvae of flies and worms have no difficulty in getting through a few millimeters of cover. Exceptionally, they have been known to emerge from feces buried up to a meter deep, although a covering of 300mm to half a meter is usually enough to control them.

Perhaps the greatest need for excreta-related health education is concerned with the children's feces. It is commonly believed that they are harmless. In fact, the prevalence of diarrheas and worms amongst children of all ages, the tendency of very young children to defecate whenever and wherever they happen to be, results in serious health dangers. (Rural sanitation and Development), John Pickford's Article on Community Health and Sanitation.

The book named ***Sanitation Strategies and Technologies, Flood-prone and High Water Table Areas of Bangladesh***, principal investigator: Dr.Noor,M.Kazi, reviewers: Dr.MD.Mujibur Rahman, Dr.M.Feroze Ahmed, Mr.Abu Jafar Shamsuddin. In this book, we have the strategies and technologies of sanitation for high-water table areas of Bangladesh. The study also reviewed and examined critically to find the suitable options for our conditions. Based on the analysis and the outcome of the socioeconomic and technical survey, recommendations are made on both sanitation and technologies. The strategies are recommended to consider in planning a sanitation program particularly in flood prone areas of Bangladesh. ***Improved Understanding:*** Improved understanding of sanitation is the pre-requisite of a successful sanitation program. People should have a clear understanding of the adverse impacts of improper sanitation and the benefit of improved sanitation. The understanding of health and sanitation of general people can be improved in several ways such as training at community level, local workshops, video films and group discussion.

**Technical Knowledge:** After having the knowledge on health and sanitation, people should know the technology of low cost sanitation options particularly for high water table

and flood prone areas. The trained people can also advise the other local people to take sanitary latrine in all kinds of situation. This can be achieved by giving extensive training program and demonstration to the concerned local groups as well as the local people.

**Cost of Sanitation Facility:** Cost of sanitation facilities is an important factor to be considered in planning a successful sanitation program. It should be affordable to the people. Providing sanitation facilities to the poor at free of charge and a tax concession to the well to do people is a good strategy to increase sanitation coverage.

**Community Participation:** Community- type built-up latrine may be considered for some special areas like flood prone area, where individual household latrines are not affordable for the poor people as it incurs a high cost. Community participation in each step is very essential for the success of such program.

**Motivation:** Motivation is required to improve unhygienic sanitation practices. Often social status, cleanliness for religion and privacy factors predominates over hygiene factors where people do not have adequate knowledge on health and sanitation. These issues can be applied strategically in motivating people to accept an improved option of sanitation. The acceptance of any improved sanitation option by community is key factor for a successful sanitation program. Motivation is utmost important for the acceptability of an improved sanitation option. Social mobilization is required to motivate the general people.

**Integrated Approach:** An integrated approach combining water, sanitation and hygiene education is needed for achieving overall success in the improvement of general health, the quality of life and the environment.

**Capacity Building:** Sanitation facilities should be improved through formulating appropriate policies and undertaking program in this area. Capacity building of the local authority as well as the COBs towards the sustainable development of overall sanitation program should be strengthened.

**Promotion of Private Sectors:** CBOs, NGOs and private sectors should be involved effectively in sanitation program and they should be promoted in the production and sale

of sanitary latrines by providing soft loans or grants. Private sectors should be encouraged and supported to establish sanitation production centers at the critical problem areas. Such as remote village, high water table and flood –prone areas for effective coverage.

**Alternative Use of Excreta:** Attempt should be taken to establish facilities of producing compost and bio-gas and animal excreta. This will provide improved cultivation, supplemented energy and reduce the load of pollution to the environment as well.

### **Pour-flush Latrine (Used by DPHE and BRAC, WASH program)**

Pour –flush latrine is identical to a pit latrine but contains a pan with water seal through which feces reaches the pit. For rural sanitation, DPHE has developed a low-cost pour flush latrine that was being sold at subsidized prices to the population. These are manufactured in the village Sanitation Centers(VSC).The VSC program has been very successful in increasing the number of water seal latrines from 36000 in 1980/81 to 89000 in 1984/85(MPERD,1991).There are over 1000 public VSCs in Bangladesh are now supplying sanitary latrines to the rural areas as integral part of water supply.

Pour-flush latrine is gradually becoming popular in urban areas as well. For density populated areas, a twin-pit off set latrine has been developed. This latrine has a permanent structure with a squatting salt and water seal pan from which the night soil is piped to two pits alternatively by a dividing box.

DPHE manufactures the ring and slab of pour-flush latrine for rural areas. The cost of materials for five rings and one slab is BDT 515. A subsidy of taka 110 was given until june1998.Since July 1998, the full cost of materials is being recovered. Recently, DPHE has changed the strategy for sustainable sanitation program. The recovery of the cost of the materials ensures the people's participations and ownership of the latrine which are very essential for sustainable sanitation program. (DPHE, 1998)

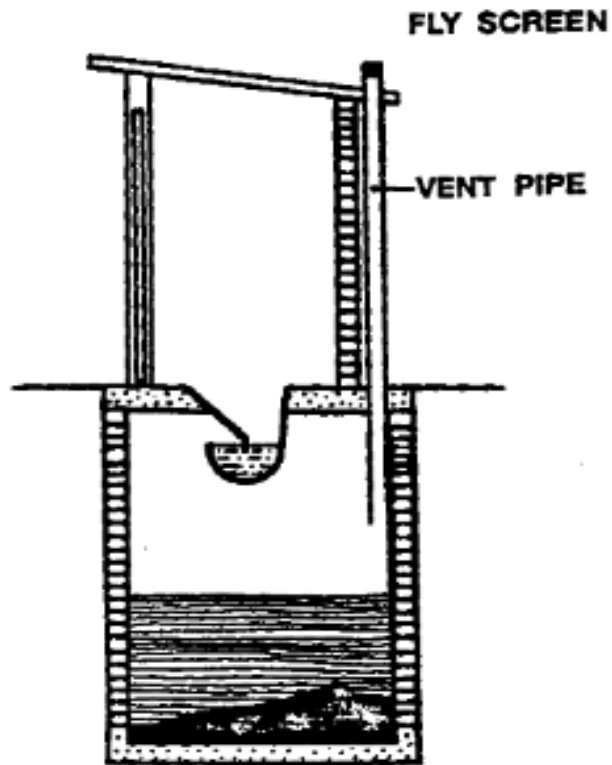


Figure-3: Pour-flush latrines-shelter over pit and offset pit

Source :([www.who.int](http://www.who.int))<sup>12</sup>

**Components:** The basic components of a pour-flush latrines are: the superstructure, the squatting plate: and the receptacle. The receptacle takes any of the following form:

- A simple pit, called a leaching pit;
- A septic tank, leading to a soak-away;
- A septic tank, leading to drain field;
- A septic tank, leading to a borehole sewer;



## *Double pit pour flush latrine*

If two pits are dug and a pipe laid to each pit from the latrine pan, when one pit is full the second pit can be used (see Figure 2).

A junction box with an inspection cover should be built where the pipe divides into two. A stone or a brick can be used to block the exit to one pit so that only one pit fills at a time.

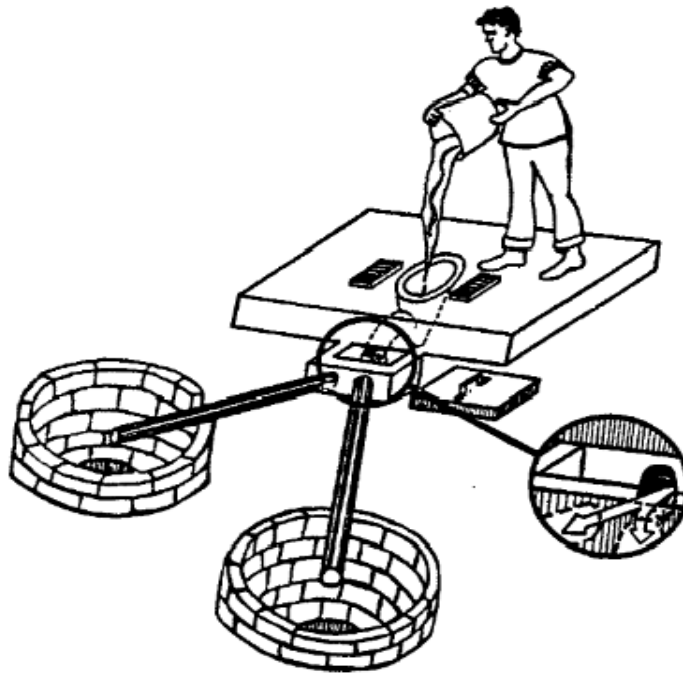


Figure 4: Double-pit latrines (the covers to the pits and the shelter are not shown)

Source :([www.who.int](http://www.who.int))<sup>13</sup>

**Types:** There are two general types of pour-flush latrine:

1. Single pit pour-flush latrine: Where the water seal trap is built into the underside of a concrete slab that is placed, in most cases, directly over a pit.
2. Double pour-flush latrine: where the excreta are transported from the toilet component to a nearby leach pit by flushing water which is poured by hand into the toilet bowl.

The conditions that must be satisfied to install a pour-flush latrine are:

- At least 6 liters of water per capita per day must be available for sanitation facilities.
- The soil characteristics must be suitable for leaching pit.
- There should not be any source of water for households purposes situated within 10 m radius of the location from the water source.
- If the soil is more of a gravel or limestone type, the distance of the leaching pit just is even further than 10 m from the water source.
- Soils which do not allow percolation at rates ranging from 0.1 minute per inch to 120 minute per inch, pour-flush latrines incorporating pits must be avoided where appropriate percolation rates do not pertain. (Islam & Kitawaki, 1996)

### **Design principles**

Pit volume where,  $v=1.33$  CPN

$V$ =volume of the pit

$C$ =sludge accumulation rate, 0.04 m<sup>3</sup>/person/year

$P$ =number of person using the latrine

$N$ =number of years the pit is to be used before emptying

Dimension=Diameter 0.6 m and Depth= Variable (2 m Minimum)

Advantages and Disadvantages

### **Advantages**

- Inexpensive
- Long-term ,appropriate and hygienic option
- Required low volume of water of flushing
- Can be upgraded

- Eliminate odor, insects and flies breeding
- Safe for the children and elderly people
- Easy construction and maintenance
- Low level municipal involvement
- Can be located inside the house

### **Disadvantages**

- Require separate sullage disposal system
- Water must be available throughout the year
- Clogged easily where bulky anal cleansing materials are used
- In areas with high ground water, hard rock or impermeable soil, construction is more difficult and expensive.

The next book is ***Total Sanitation: A community Stake***, by Helal Mohiuddin, PhD, Md. Ayub Ali Edited by: Joseph Halder, First published: December 2005, published by NGO Forum for Drinking Water Supply & Sanitation, printed by: S.N. Printers. In this book *Chapter 5* heading ***CLTS in Action: Leadership, co-ordination & participation*** portray that in terms of the comprehensiveness, the process of community led total sanitation is based on three important attributes. Altogether, these three attributes constitute the body of the community matrix for the sanitation movement. All other optional strategies and techniques derive from these three core attributes. The heading of this chapter, ***leadership matters*** depicts the Union Parishad chairman experience where the chairman's ideology is to instill the notion of proper sanitation in the mind of the community people over a long period of time so that they themselves can lead the movement outside bureaucratic intervention. The decentralization of leadership is another heading where the chairmen of Union Parishad along with Union Parishad members visit each and every household to booster sanitation campaign. Leadership is decentralized at this stage in all Unions. The Union Watsan committees are revived and restructured. Gradually, the Union Parishad

formed Ward Sanitation Committees, Village Development and Para Committees. Each Union Parishad has sanitation coordinator and nine volunteers. Nine government officials comprised of health workers, sanitation workers, agriculture extension workers and family planning workers are appointed as monitors of the sanitation programs' evaluation teams. The volunteers help conduct the community based sanitation surveys in collaboration with the NGOs and report back to the Union Parishad. Mosque and temple based regular briefing sessions become boosted up to continue motivation program even after achieving total sanitation in Unions.

In the chapter, **Women Share equal Stakes** depicts problem of sanitation describes that female Union Parishad member says that meeting motivated her to overcome sanitary problem. The learning has turned her into a social mobilizer from remaining mere a peoples' representative. She visited ward level stake holders to share responsibilities among imams, teachers, community leaders, youth groups and so on. She followed up and monitors the activities of the volunteers; helps to select the place of latrine installation and other related activities. The subtitle named **Coordination Yields** says that it builds upon three way communication of the actors, policy-makers and the implementers at grassroots level. In the grass root level the Union Parishads, the chairman and members are guided by the directives from the local and regional administration. On the basis of guidelines, set forth by the district administration, the Upazila administration holds the responsibilities of counting on accountability, governance and transparency of the local government in the execution of the CLTS process. LGI also receive all forms of administrative and legal support time by time as and when needs arise. Attended by NGOs and members of LGIs, the first administrative meeting of the local government institutions usually held by the Deputy Commissioner's office. There, the Deputy Commissioner announces the national plan to implement sanitation component of the MGDs. In the same month, Upazila Nirbahi Officer calls meeting of all Union Parishad chairmen and members. DPHE executive and representative of the local NGOs to set policies and reach operable work-plans about meeting the set deadline to accomplish total sanitation. The chairmen and local representative of NGOs speak on the need of mobilization of the community people for

their all out cooperation and active involvement to turn sanitation goal into a social movement. Sometime their target seems to be a over ambitious, and a challenge for the Union Parishad and NGOs to ensure the participation of the people. Especially in the dispersedly located habitation and poverty-stricken communities.

Most Unions achieving 100% sanitation coverage has received direct field-level supervision and monitoring of the Upazila administration. The activist responsibilities by the Union Parishad chairmen have boosted up enthusiasm and zeal of the people of the Unions. On the other side of the coin, communication of the institutional bureaucracy with grass-root creates a healthy environment of understanding and mutual respect between the beneficiaries and the service providers.

In the above portion of the chapter, it is clear from the literature review specially the books on sanitation and information from the various sources and data collected from the related websites highlight the state of sanitation in the national and international level. We can see the reflection of strategies, technologies and approaches which will be found in the coming chapters. This will ultimately help us to know about the overall condition of sanitation in the country.

## **2.10 Conclusion**

We can say that the Government of Bangladesh has formulated different policies and strategies aiming at sanitation and drinking water coverage all over the country. We know that DPHE, LGD and local administration are working in this sector as the Government agencies. Government has been doing a good job in this sector for a long time with the collaboration of NGOs. Some literatures are reviewed in this chapter that has also the insight into the technologies, strategies and approaches of sanitation. The success of sanitation in the field level, the coordination/cooperation of the NGOs like BRAC and local administration are seen in some of the books. But especially on the BRAC's contribution to the national sanitation program has limited printed resources. However, it is undoubtedly

can be said that BRAC has been doing a huge task in water, sanitation and hygiene sector, along with other NGOs in our country. BRAC is working closely with the government to achieve MDG targets relating to safe drinking water and basic sanitation, but now a new target is seen in SDGs ( goal 6 not only includes targets for drinking water, sanitation and hygiene (WASH) but also for water resources management) .And to meet the upcoming challenges undoubtedly the government, BRAC and, other NGOs relating sanitation program, should work together with the sense of patriotism to get the tremendous success in country wide sanitation coverage .

# Chapter 3

## Overview and Strategies

### 3.1 Introduction

Government has formulated different policies and strategies focusing on sanitation and drinking water. NGOs and Bangladesh Government's LGD and DPHE are working in this sector. BRAC has come a little bit later to this sector compared with some other pioneer NGOs. Along with other NGOs; BRAC has been working closely with the government to provide safe drinking water and basic sanitation facilities. In this chapter, we will have a glimpse to the various strategies and approaches taken by BRAC in Bholahat Upazila. The criteria of selection of the Upazila, the baseline survey, the various data which are accumulated from local BRAC office and the local administration- these all are delineated in this chapter. This information is certainly important for the better understanding of the sanitation condition in the Upazila, ultimately- the thesis.

### 3.2 Program Strategies

First of all we should discuss what is a strategy? We know that 'strategy' is a high level plan to achieve one or more goals under conditions of uncertainty. Strategy is important because the resources available to achieve these goals are usually limited. A strategy describes how the ends (goals) will be achieved by the means (resources). This is generally tasked with determining strategy. Strategy can be intended or can emerge as a pattern of activity as the organization adapts to its environment or competes. The government has developed some strategies to achieve its goals on sanitation. BRAC's WASH program has also some strategies. The ongoing WASH Program has the following strategies;

- ✚ **Working in New Areas:** Strategies for integrated sanitation, hygiene and water in difficult- to – reach, underserved areas in new Upazilas under WASH II have been taken.
  
- ✚ **Beneficiary Selection:** Selection of the extremely poor families.

- ✚ **Ensuring Sustainability:** Continued work, to help ensure sustainability and increase coverage in 150 Upazilas of WASH I and also in the WASH II areas.
- ✚ **Capacity and Empowerment:** Building capacity, networking and collaboration with the government, private, non- government institutions to carry out and sustain the program.
- ✚ **Innovation:** A research and learning program to support this program.
- ✚ **Specific Support Measures:** A loan from a revolving fund and a grant—has been included in the program to ensure the poor and the hardcore poor access to be able to construct a sanitary latrine.
- ✚ **The Total Sanitation Strategy:** To create inter-community pressure to construct sanitary latrines and adapt hygienic behavior through Village WASH Committee (VWC). The better-off groups within the communities are expected to play an advocating role.
- ✚ **Formation of VWC:** The village WASH committees will have representatives of all income groups within the communities. The use of well-designed PRA methodologies will ensure that all these groups will be able to participate in a meaningful manner in the decision making and planning process.

**(BRAC: 2011)**

**Some policies and strategies are given below:**

- ❖ National Policy for Safe Water Supply & Sanitation (NWSS Policy), 1998
- ❖ The Pro-poor Strategy for Water and Sanitation 2005
- ❖ National Water Policy 1999 and National Water Management Plan 2004
- ❖ The National Sanitation Strategy



### 3.3 Approaches and Techniques:

The Bangladesh Government developed a draft 'National Sanitation Strategy' in 2005, which describes the ways and means of achieving the national target by providing uniform guidelines. The Union Parishad has been identified as the focal point for the total sanitation campaign. The government had set itself an ambitious goal: to achieve 100% sanitation coverage by 2010. To ensure 100 percent sanitation by 2010 the government emphasized the following initiatives under the National Sanitation Dissemination:

- ✚ Mobilize different government, non government and development organizations.
- ✚ Fulfill the coverage into three phases (2005, 2008 and 2010) for 100% sanitation by 2010 by local government institutions and NGOs.
- ✚ All city corporations, Upazila, Pourashava, Ward, Unions develop task forces involved for dissemination, and observe October as 'Sanitation Month'.

For this it would require a 12 percent per annum increase. But except some discrete success this daunting task has been failed. But this challenging target has much pushed ahead the MDG goal concerning the drinking water and sanitation. The government is taking initiatives to achieve this national sanitation target in collaboration with development partners and NGOs. The strategy focuses on 21 specific issues that include among others approaches for improving urban sanitation, reaching hardcore poor, sustainability, monitoring and evaluation, emergency response and financing the sanitation program. It describes processes for improving sanitation coverage both in rural and urban areas.

- ❖ □ Capacity of local government institutions (LGIs), particularly Union Parishads and Upazilas, should be enhanced, so that they are capacitated to play key roles in improving sanitation coverage.
- ❖ □ DPHE should facilitate the LGIs in implementation of sanitation programs and should also be capable to monitor the quantity and quality of hygienic latrines.

- ❖ □ In cities, where large sections of the urban population are without sanitation services, service provision should be de-linked from land tenure-ship, thus allowing the utilities to extend their services to the slums.
- ❖ □ Public-private-community partnership is to be promoted for effective sanitation service delivery to slums. It is proposed that partnership be forged between public utilities/LGIs, NGOs/private sector and slum dwellers to set up and manage community sanitation solutions in all slums.
- ❖ □ The strategy also calls for enforcement of appropriate desludging of on-site sanitation systems and subsequent sludge disposal.

**(BRAC: 2011)**

We already know that BRAC's water, sanitation and hygiene program was aimed to achieve the MDGs goal of reducing the proportion of people without the access of safe drinking water and basic sanitation by half. WASH provides sustainable and integrated services in rural and isolated areas, breaking the cycle of contamination caused by unsanitary latrines, contaminated water and unsafe hygiene practices. BRAC ensures sustainability of these interventions by some strategies and approaches like:

- ✚ encouraging community ownership
- ✚ developing linkages with local governments
- ✚ Encouraging local entrepreneurs to supply low cost hardware

**Empowerment and Social Change to End Contamination**

Since 2006, BRAC in Bangladesh in partnership with the Dutch and British Government, as well as Bill and Melinda Gates Foundation, has undertaken the WASH program in 250 Upazila (sub districts) with lower and average sanitation coverage. The integrated approach, which raises demand for sanitary latrines, promotes safe hygiene practices and

provides access to safe water, has achieved results at an unprecedented scale in its first phase.

During 2006-2011, BRAC was able to have positive impacts on 38 million rural people. 25.9 million people can now use sanitary toilets, 38.8 million people have learned about the importance of hygiene, and 1.8 million people can now access water without arsenic and fecal contamination in 150 Upazilas in Bangladesh. The approaches and strategies to achieve the success were through:

- ✚ Community institution building in the respective area
- ✚ Hygiene education
- ✚ Local supply chain
- ✚ Infrastructure development ( tube well, sanitary latrines establishment etc)

### **Building a Nationwide Sanitation Movement from the Grass roots:**

The second phase of WASH program (2011-2015) focuses on sustaining the progress made towards a national sanitation movement. BRAC extended coverage from 150 to 250 Upazilas in this phase to ensure sanitation services to 35 million people, hygienic education for 63.5 million and access to safe drinking water for 2.5 million people in Bangladesh. ([www.brac.net](http://www.brac.net))<sup>14</sup> Special attention is being paid to reach 'hard to reach areas', where providing technical solutions and bringing about behavioral changes are particularly challenging. BRAC's extensive network of committed staff and community based volunteers work together with men, women and children, local government, school teachers local entrepreneurs and religious leaders to maximize the impacts and sustainability of WASH program's interventions and take a measurable leap-in personal, family hygiene, sanitation and water supply.

## **Empowering Women and Rural Communities to Break the Cycle of Fecal Contamination**

Installation of water supply and toilets is not enough to improve people's health-good hygiene practices are essential. BRAC's WASH program has adopted particular approaches for delivering targeted hygiene messages with an emphasis on empowerment of community members, especially women. At the core of the WASH program are stakeholders participation and collaboration at the village level where hygiene practices are closely linked to improve sanitation and safe water supply facilities .A bottom –up approach in participation and planning is facilitated through Village WASH Committees, which operate with representation from a cross section of the community and local stakeholders-particularly the poor women, as well as other rural institutions, Government agencies and NGOs that are active in the region. BRAC trains these Village WASH Committees, with approximately 11 members including six women and five men, so that they can play a central role in helping the program provide hygiene education, identify targeted clients, and access safe drinking water.

## **Changing Behavior of the Future Generation with Interventions in Schools**

Schools in rural Bangladesh either have poor sanitation facilities or none at all. The lack of separate toilets for girls is a major factor causing them to miss classes or to drop out of school altogether .From 2006-2014, WASH program co-financed construction of separate toilets for boys and girls in over 4900 secondary schools complete with water and waste disposal facilities to cater for girl's menstrual needs. BRAC also trained teachers and helped from Student Brigades and School WASH Committees to ensure that the facilities are kept clean and continue to function. Another thing is the extensive menstrual hygiene management solution including low cost sanitary pads, are acting as key factors in helping girls stay in school.

## **Sensitizing the Communities on Healthy Hygiene Practices**

To ensure the sustainability of the WASH program by raising the demand for WASH services through a series of advocacy campaigns including community meetings, forums and workshops. Hygiene promotion is a broad process and depends on people's socio-culture behavior that is why BRAC targets different population segments and caters to their demographic needs accordingly.

## **Delivering Hygiene Messages through Faith Based Campaigns**

Over 18500 Imams (local religious spokespersons) have been delivering Khutba (sermons) across the country, not only to provide hygiene messages, but also to promote men's role in domestic chores to reduce women's work burden. Imams are trained on hygiene issues so they can deliver messages using sermons based on verses from the holy Quran and Hadith that refer to cleanliness and hygiene practices. This has been received enthusiastically by Imams and other agencies and NGOs. BRAC also provides orientation to the leaders of various religions and organize them, and with their assistance, raised awareness during meetings in temples and pagodas.

## **Ensuring Supply through Local Entrepreneurs**

Strengthening the capacity of sanitation entrepreneurs in WASH operated areas is one key strategies to increase the access of sanitation materials to the community. BRAC established and revitalized rural sanitation centers in each Union of the wash-operated areas by providing loans and technical trainings to these entrepreneurs. As the WASH program continues to create demand for hygiene facilities, the sanitation centers operate to ensure their steady supply.

## **Innovation for Sustainable Sanitation**

Reuse of fecal sludge: meeting the challenge of next sanitation BRAC anticipates the hazards of pit latrines filling up, which may results in dangerous discharge of human waste in the environment. From a sustainability perspective, BRAC, therefore, intends to promote safe production of a marketable fertilizer from single and double pit latrine system.

## **Monitoring and Research for Transparency and Effectiveness**

To ensure better project management, transparency and effectiveness of the funds, the WASH program has employed a range of monitoring approaches by itself, as well as by an external research division and BRAC's independent monitoring divisions. The program's built-in monitoring and quality control unit monitors the program throughout the year, while BRAC's monitoring division independently monitors based on agreed time and set of indicators. In addition a Qualitative Information System (QIS) has been introduced to measure hygiene practices among the communities to help evaluate sustainability of its inventions. This new and highly effective evaluation system allows quantitative figures to be interpreted in to qualitative context, using smart phones to transfer data from field to head office. The Sense Maker Platform is another tool to record and evaluate qualitative achievements, understand further demands and better screens for scopes of necessary work and, modification of operational activities. The Life Cycle Cost Approach was introduced in the program with a financial sustainability check by providing a detailed overview of unit of cost expenditure. This helps to monitor the services delivered over time, thus resulting in a better value for money. BRAC's research and evaluation division carried out several independent researches and prepares baseline, mid-line, and end line surveys to improve the program and maintain its relevance in addressing challenges of WASH practices in the country. BRAC commissioned action oriented research to identify sustainable technologies and affordable designs in sanitation and access to safe and clean water in difficult geographical areas. These areas remain a challenge for many agencies across the world in implementing their services. In addition to technological issues, BRAC plans to undertake action oriented research to develop effective strategies in hygiene promotion and sanitation supply chains to develop more sustainable WASH program.

Now let us see the condition of Bholahat Upazila.

### 3.4 Bholahat Upazila at a Glance

**Bholahat Upazila** (Chapaiwabganj district) area 123.52 sq km, located in between 24°48' and 24°58' north latitudes and in between 88°08' and 88°16' east longitudes. It is bounded by West Bengal on the north, east and west, Shibganj (Nawabganj) and Gomastapur Upazilas on the south.

**Population: Total** 92149; male 46609, female 45540; Muslim 91394, Hindu 747' and others 8.

**Water bodies:** Main river: Mahananda; Bhatia, Vaeoa, Kalan, Amgachhi, Kawbari and Chatra beels are notable.

**Administration:** Bholahat Thana was formed in 1918 and it was turned into an Upazila in 1984.

**Table: 2 Information of Bholahat Upazila**

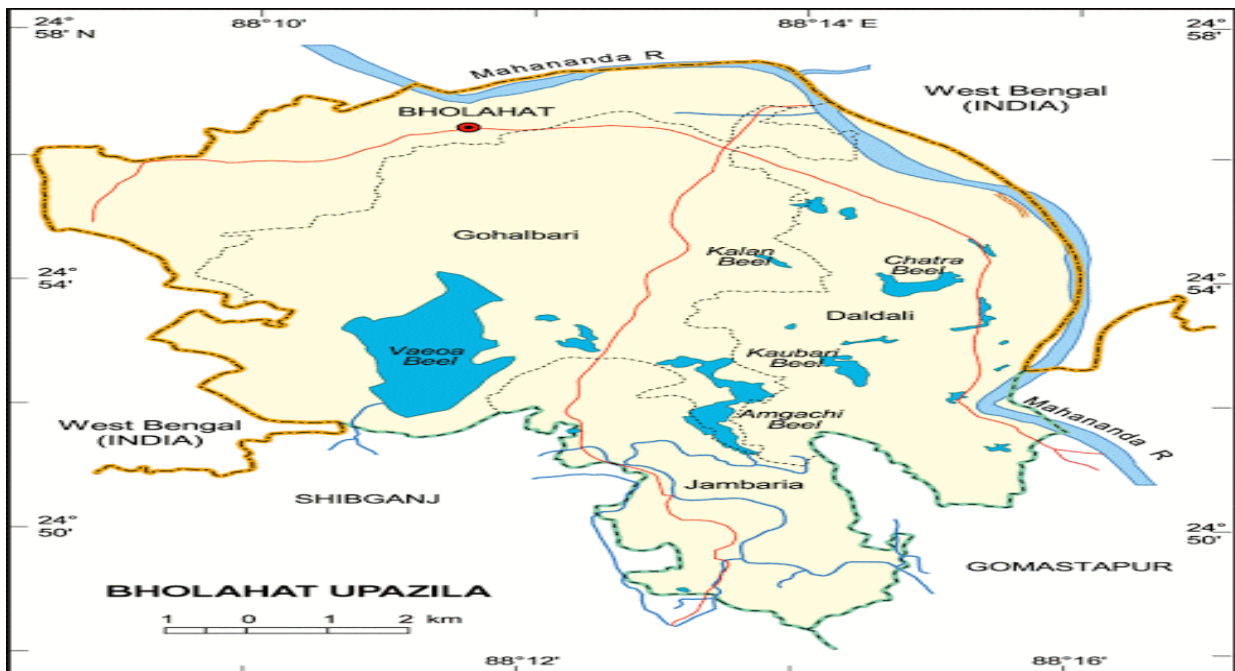
Upazila								
Municipality	Union	Mouza	Village	Population		Density (per sq km)	Literacy rate (%)	
				Urban	Rural		Urban	Rural
-	4	45	93	13103	79046	746	50.1	37.4

Upazila Town				
Area (sq km)	Mouza	Population	Density (per sq km)	Literacy rate (%)
5.07	5	13103	2584	50.1

Name of union	GO code	Area (acre)	Population		Literacy rate (%)
			Male	Female	
<b>Gohalbari</b>	<b>56</b>	12143	12154	11881	41.35
<b>Jambaria</b>	<b>75</b>	4569	7619	7348	30.41
<b>Daldali</b>	<b>37</b>	8378	13093	13123	38.78
<b>Bholahat</b>	<b>18</b>	5436	13743	13188	42.58

Source :([www.banglapedia.org](http://www.banglapedia.org))<sup>15</sup>

**Archaeological heritage and relics** Shiva Mandir, Jadunagar Mosque (Mughal period), Gopinathpur 'Mosque and Bazratek Mosque (Sultani period), Mazar of Shahabuddin Shah (R), Mazar of Bara Khan Gazi (R), Triratna Mandir.



Map of Bholahat Upazila,Chapainawabganj(Not in Scale)

Source :([www.mapofbangladesh.blogspot.com](http://www.mapofbangladesh.blogspot.com))<sup>16</sup>



**Historical events** Two Deva statues of Gupta period and copperplate inscriptions on land grant by Dharma Pal was found in this Upazila. In November of 1893 then District Magistrate of Maldaha, Umesh Chandra Batball discovered the inscription from Mori Beoa of village Khalimpur of the Upazila. An encounter was held between the freedom fighters and the Pak army on 16 October 1971 in which one freedom fighter was killed. The Pak army conducted mass killing and plundering on 9 November at village Jambaria of this Upazila.

**Religious institutions** Mosque 184, temple 7, tomb 1. Noted religious institutions: Jadunagar Mosque, Gopinathpur Jami Mosque, Jambaria Jami Mosque, Baratek Jami Mosque, Bara Khan Gazi Tomb, Tre ratna Mandir.

**Literacy rate and educational institutions** Average literacy 39.2%; male 39.7%, female 38.7%. Educational institution: college 4, secondary school 15, primary school 55, madrasas 15. Noted educational institutions: Bholahat Mohebullah Degree College (1986), Bholahat Romeshwar Pilot High School (1911), Mushareevuza High School (1962), Gohalbari Senior Fazil Madrasa (1961).

**Cultural organizations** Library 2, club 21, theatre group 1, women's organization 1, auditorium 1, cinema hall 1.

**Main sources of income** Agriculture 66.27%, non-agricultural laborer 5.22%, industry 0.58%, commerce 12.62%, transport and communication 1.05%, service 3.63%, construction 0.69%, religious service 0.17%, rent and remittance 0.14% and others 9.63%.

**Ownership of agricultural land** Landowner 42.25%, landless 57.75%; agricultural landowner: urban 48.12% and rural 41.29%.

**Main crops** Paddy, wheat, jute, mustard, pulse, sugarcane, vegetables.

**Main fruits** Mango, jackfruit, litchi, blackberry, palm, coconut, watermelon, plum.

**Fisheries, dairies and poultries** Fishery 4, dairy 5, poultry 20.

**Communication facilities** Roads: pucca 80.86 km, semi-pucca 12.52, mud road 224.27 km.

**Noted manufactories** Silk mill, rice mill, flour mill.

**Cottage industries**, Goldsmith, blacksmith, potteries.

**Hats, bazars and fairs** Hats and bazars are 14, fairs 3. Gohalbari Hat, Bara Gachhi Hat, Munshiganj Hat (Kanar) and Poladanga Mela, Bahadurganj Mela and Bazratek Mela are notable.

**Main exports** Silk yarn, mango, and vegetables.

**Access to electricity** All the Unions of the Upazila are under rural electrification net-work; however, 16.62% dwelling households have access to electricity.

**Sources of drinking water** Tube-well 87.17%, pond 0.44%, tap 0.52% and others 11.87%. The presence of arsenic has been detected in shallow tube-well of this Upazila.

**Health Centers** Upazila health complex 1, hospital 1, health and family planning centre 4, charitable dispensary 1, clinic 3.

**Sanitation** 9.25% (urban 22.71% and rural 7.06%) of dwelling households of the Upazila use sanitary latrines and 44.08% (urban 49.35% and rural 43.22%) of dwelling households use non-sanitary latrines; 46.67% of households do not have latrine facilities.

**NGO activities** BRAC, Proshika, Manobic Unnayan Sangstha (MAUS).

Source ([:www.banglapedia.org](http://www.banglapedia.org)) <sup>17</sup>

### **3.5 Criteria of Selection of Hardcore Poor**

The selection of hardcore poor households for additional support or cross-subsidizing is based on the criteria defined by the government, which if needed can be refined according to local circumstances;

- ✚ Landless households.
- ✚ Homeless households or Pavement dwellers.
- ✚ The main earning person or the head of the household is a day laborer, owning less than 50 decimal of agricultural land or residing in a rented premise less than 200 square feet, and having no fixed source of income.
- ✚ Households headed by disable person, woman, or elderly person (65 +).

**(BRAC: 2011)**

### **3.6 Criteria of Selection of Areas (Upazilas)**

For the selection of Upazilas that will be covered by the program the following criteria is used:

- ✚ Low income levels and economic development and high percentage of population living below the poverty line.
- ✚ Sanitation coverage below 50%.
- ✚ High incidence of arsenic contamination of existing water sources (Upazilas and villages).
- ✚ Technical and economic feasibility of providing safe water within the framework of the program (villages).
- ✚ Willingness to collaborate with BRAC during the planning and implementation of safe drinking water supply systems and willingness to pay for the provided services by the villagers.
- ✚ Presence of BRAC network and scope to collaborate with local line departments of the government.

**(BRAC: 2011)**

### 3.7 Some Important Data of Bholahat Upazila:

**Table 03: Union Wise BRAC Sanitation Coverage (Up to June 2015)**

SI	Union	NO of HH	Sanitation Coverage			More than 2 HHs			Unhygienic Latrine			Without Latrine	
			Latrine	HHs	%	Latrine	HHs	%	Latrine	HHs	%	HHs	%
1	Bholahat	7168	3633	3980	56	186	576	8	197	316	4	2296	32
2	Gohalbari	6638	3098	3341	50	117	362	5	-	-	-	2934	44
3	Doldoli	7598	2899	3270	43	101	312	4	-	-	-	4016	53
4	Jambaria	4228	1935	447	51	65	209	5	-	-	-	1867	44
	<b>Total</b>	<b>25627</b>	<b>11565</b>	<b>12738</b>	<b>50</b>	<b>469</b>	<b>1460</b>	<b>6</b>	<b>197</b>	<b>316</b>	<b>4</b>	<b>11113</b>	<b>43</b>

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 04 June 2015(Month Wise Sanitation Coverage)**

Latrine	WS Change	Repairing	Total
82	12	-	94
102	-	-	102
95	-	-	95
69	-	-	69

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 05 BRAC School Sanitation and Hygiene (Establishment of Latrines)**

Sl No	School Name	Type	Student Number	Location	Usable Latrine	Date of Latrine Establishment	Total Expenditure (Taka)
1	Musrivuja Yusuf Ali High School	Co-education	355	Bholahat	01	21.3.2013	95901
2	Doldoli High School	Co-education	119	-	01	4.05.2013	166791
3	Sobza Pilot High School	Co-education	318	-	01	25.05.2013	97681
4	Nekjan High School	Girls	350	-	02	29.05.2013	96837
5	Adatola High School	Co-education	250	-	01	23.01.2014	88711
6	Fotay pur High School	Co-education	310	-	01	25.11.2014	89995
7	Borogasi High School	Co-education	230	-	01	28.01.2014	96151
8	Bholahat Rameshor High School	Co-education	300	-	01	25.11.2014	144986
9	Gohalbari High School	Co-education	120	-	02	28.01.2014	91492
10	Monjur Ahmed High School	Co-education	235	-	01	25.11.2014	119995
11	Poladanga Din Mohammed High School	Co-education	225	-	01	16.11.2014	100757

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 06 Base Line Survey of Bholahat Upazila (2013)**

Union	Total HH	Type of HH		Socio economic Condition of HH					population			Population		
		F	M	BRAC HCP	Govt.HCP	BRAC VO2	OTHER NGOS	NON TARGET GROPP4	UPTO 5 CHILD	M	F	Total M	Total F	Total
<b>Bholahat</b>	7168	465	6703	1961	165	369	1827	2846	-	1585	1618	14426	14342	31971
<b>percentage</b>	-	6	94	27	2	5	25	40	5		5	45	45	-
<b>Gohalbari</b>	6638	480	6158	1875	275	428	1939	2121	1648		1571	13084	13201	29504
<b>percentage</b>	-	7	95	28	4	4	29	32	5		5	44	45	-
<b>Jambaria</b>	4223	188	4035	948	134	210	1352	1579	943		966	8170	8288	18067
<b>percentage</b>	-	4	90	22	3	5	32	37	5		5	45	44	-
<b>Doldoli</b>	7598	512	7086	2434	306	437	1722	2699	1603		1556	14651	12147	32147
<b>percentage</b>	-	7	93	12	4	4	6	23	36		5	5	46	-

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 07 Information on Tube well**

Place	Single	joint	Type		Operative	Non operative	Platform			Arsenic Tested		
			Deep	Shallow			kacha	pacca	Defective	Yes	Free	Don't know
<b>Bholahat</b>	1599	886	2	2443	2412	33	2017	399	29	1501	1501	0
<b>percentage</b>	22	12	-	100	09	1	82	16	1	61	61	-
<b>Gohalbari</b>	1125	324	3	1446	1414	35	1235	192	22	1024	1024	0
<b>percentage</b>	17	5	-	100	98	2	85	13	2	72	72	
<b>Doldoli</b>	860	493	0	1353	1336	17	1130	203	11	975	975	0
<b>percentage</b>	11	06	-	100	09	1	84	15	1	72	72	-
<b>Jambaria</b>	515	377	0	892	865	27	678	193	21	314	314	-
<b>percentage</b>	12	9	-	100	97	9	76	72	2	35	35	-
<b>Total</b>	<b>4059</b>	<b>2080</b>	<b>5</b>	<b>6134</b>	<b>6027</b>	<b>112</b>	<b>5069</b>	<b>987</b>	<b>83</b>	<b>3832</b>	<b>3832</b>	
<b>percentage</b>	16	8		100	98	2	83	61	1	62	62	0

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 08 Information on Latrine Type**

Unions	Pit Latrine	Ring Slab(Broken water seal)	Ring Slab (with water seal)	Pacca with Septic Tank	Opset	No Latrine				
<b>Bholahat</b>	2254	407	284	85	36	1247	464	0	0	2391
<b>percentage</b>	31	6	3	1	1	17	6	-	-	33
<b>Gohalbari</b>	2393	35	38	99	46	1038	430	0	0	2559
<b>percentage</b>	36	1	1	1	1	16	6	-	-	39
<b>Doldoli</b>	3648	35	16	94	100	692	266	0	0	2747
<b>percentage</b>	48	1		1	1	9	4	-	-	36
<b>Jambaria</b>	2011	22	20	28	20	459	206	0	0	1457
<b>percentage</b>	48	1		1		11	5	-	-	35
<b>Total</b>	10306	499	358	306	202	3436	1366	0	0	9154
<b>percentage</b>	40	2	1	1	1	13	6	0	0	36

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**Table no: 09 Information on Hygiene**

Union	Clean Latrine	Water Facility beside Latrine	Soap inside Latrine
<b>Bholahat</b>	1339	880	930
percentage	33	55	20
<b>Gohalbari</b>	1207	801	838
percentage	32	21	22
<b>Doldoli</b>	823	732	805
percentage	18	16	17
<b>Jambaria</b>	498	373	388
percentage	19	14	15
<b>total</b>	3876	2786	2961
<b>%</b>	25	18	19

(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)

**The Format of Village WASH Committee (VWC)** After the survey, VWC was formed through PRA. There are 229 VWCs in Bholahat upazial. Every committee consists of 11 members. There is a provision of 2 advisors in VWC but it is not mandatory. The committee formation of a VWC is as follows:

#### **Format of a Village WASH Committee (VWC)**

- 1 **President:** Retired teacher or honorable person of the society
- 2 **Member Secretary:** Youth woman
- 3 **Treasurer:** Imam of local mosque
- 4 **Member:** Sastho Sebika (SS) from BRAC Health Program
- 5 **Member:** VGD card holder any local woman
- 6 **Member:** Any member of BRAC Village Organization (VO)
- 7 **Member:** Adolescent girl member
- 8 **Member:** Anybody from any local club or organization
- 9 **Member:** Any local small entrepreneur
- 10 **Member:** Other NGO member
- 11 **Member:** Any countable person or village doctor



*(Source: Upazila BRAC (WASH) Program Office, Bholahat, Chapainawabganj).*

VWCs are the social organizational body of WASH Program in the village level. This committee does meeting in two months interval to assess the progress of the program.

### **3.8 Activities of WASH in Bholahat Upazila:**

BRAC has already distributed 1668 sets of sanitary latrines, in the year 2014; BRAC gave 321 sets of ring slab latrines free of cost among the poor in 2015. They have built 04 sets of school latrines in 2013 and 6 school latrines in 2014 and 01 in the year 2015 in Bholahat Upazila. BRAC has also conducted 193 VWC meetings in 2013, nearly 998 in the year 2014 and 452 in 2015 till June. BRAC has trained people 168 in 2014, number 72 in 2015, and conducted total 3 rallies in 3 years subsequently. (2013, 2014, 2015). Apart from the WASH employees, VWC members are also contributing a lot for the successful implementation of WASH Program in that area. WASH Program is running in Bholahat Upazila with the support of one Project Manager, one Program Officer (PO), three Field Officers, and 8 Project Assistants (PA). BRAC has also training and loan facilities for people of the operating area.

- ❖ **Training:** From village WASH committee the chairperson including the members total 208 persons got training from BRAC training centers. And 80 students got training from BRAC on hygiene and cleanliness of latrines.
- ❖ **Loan:** In the fiscal year of 2013-14, around 220 persons got BRAC loan facility for establishing sanitary latrines in their households.

### 3.9 Hygiene Knowledge and Practices in Bholahat Upazila

Primarily the WASH program has focused on tube wells and latrines installation. At the initial stage, the hygiene was not incorporated in the program. Hygiene was paid little attention as compared to other two components 'safe drinking water' and 'sanitation'. But without good hygiene practices, ensuring safe drinking water facility and proper sanitation will not be achievable. Hygiene education and knowledge prescribed by WASH Program are disseminated to the people by the following ways:



**Figure no 5 : Some ways of achieving hygiene education in WASH Program.**

Source: (Mollah M.M, 2013)

- ✚ **Women's Meeting:** There are two Program Assistants (PA) in every Union. Everyday each PA has to arrange six meetings consisting of 10 women members per meeting.
- ✚ **Children Meeting:** One meeting every day with children of 50 households.

✚ **Adolescent Girls Meeting:** One meeting everyday with adolescent girl of 50 households.

✚ **Juvenile and Gents Meeting:** Every day one gents meeting and one juvenile meeting held for 50 households each supervised by a field organizer (FO).

*(Source: Upazila BRAC (WASH) Program Office, Bholahat Upazila.)*

In addition to this, Village Wash Committees usually sit for the meeting every two months interval for the assessment of project progress. In this meeting hygiene messages are disseminated. Hygiene messages are also disseminated through the meeting of health program, microcredit meeting, gents meeting, adolescent girls club, School Wash Committee, School Brigade, before Khutba of Imam on hygiene and cleanliness during Jumma prayer.

### **3.10 Conclusion**

This chapter has given the national program strategies of the government and the BRAC's program activities in the study area-Bholahat Upazila. The theoretical program concept and its practical application in grass roots level (Upazila) have been shown in this chapter. The baseline survey of the Upazila, the various activities taken by BRAC's WASH program and the present condition of the sanitation in the Upazila can be easily understood through this chapter. This part of the dissertation is the core of information regarding Upazila sanitation and its implementation advancement. This chapter paved the way for the next chapter where further data are analyzed for an overall view of BRAC's sanitation in the Upazila level.

## Chapter 4

### Findings and Analysis

#### 4.1 Introduction

Bholahat Upazila has been selected as the study area of this research from 254 Upazilas i.e. two methods have been used for the study- one is the interview method and another is the case study. A structured and closed form of questionnaire has been developed consisting of two parts. The first part is the 'Demographic profile' and the second part is the 'Respondent's view profile' having twenty questions. The total number of respondents is 21. Respondents have been randomly selected in respect of gender, age, income level, education, religion and so on. The questionnaire is designed in such a way that the required information comes out with clarity.

Four case studies have been taken from the population and two case studies were taken from the program authority. These case studies will help us to get in depth knowledge about the impact of WASH program on the poor people through analyzing their behavior, attitude, and experiences. The case study method gives a researcher new insights into the pattern, structure and peculiarities found in the information derived from the subjects. It can enable us to explore, reveal and understand problems, issues and relationships which are very important for finding the real facts. We have two case studies from the beneficiary and public representative and two case studies from the program authority to get in depth knowledge about the overall impact and the true condition of WASH program on the poor people of the selected Upazila. These four case studies are given below;

**Table no: 10 Case Studies**

NO OF CASE STUDIES	NAME OF THE CASE STUDY
CASE STUDY 01	❖ <b>Rubina Begum, a beneficiary</b>
CASE STUDY 02	❖ <b>Royeda Begum</b> is the public representative (Women member of Doldoli Union Parishad)
CASE STUDY 03	❖ Md.Sirajul Islam, Upazila Manager ,BRAC (WASH) program, Bholahat
CASE STUDY 04	❖ <b>Mr.Shahinul Hoque</b> ,Sub Assistant Engineer, Department of Public Health, Bholahat

## 4.2 Case Study: 01

# Rubina Begum

**Village:** Musrivuja

**Union:** Doldoli

**Post Office:** Musrivuja

**Upazila (sub-district):** Bholahat

**District:** Chapainawabganj



**Rubina Begum**, her age is nearly 32 years. She got married to Md. Liakot Ali and a house wife by profession. She lives in a small cottage with her husband, two sons and a daughter. She did not take any loan from BRAC's WASH program or other initiatives. But she got involved with BRAC's strategic approaches such as VWC meeting at the house yard level. A few years ago, a field officer of BRAC's WASH came and motivated her to build a sanitary toilet in her house. She kept on participating in WASH hygiene meetings. There she could know

**W**itnessing one mass rally at the Upazila Parishad where she found the participation of all levels of people highlighting the need for sanitation practices in day to day activities through demonstration of some visual aids like posters, leaflets, banners, sanitary latrine models, safe water usage and use of soap/ash after defecation and before taking meal. The Upazila administration, BRAC and other NGOs jointly organize a rally on the Sanitation Day... there she found BRAC's field officer, Mr. Sirajul Islam, participating and giving leaflets in the front of the rally.

and understand many things like importance of using sanitary latrine, necessity of hand washing, importance of safe drinking water, hygiene knowledge and the proper hygiene practices etc which she did not know before joining BRAC's meeting. She shared the knowledge with her kith and kin and motivated them seriously-which ultimately helped them all.

A few years ago, when Rubina had a kacha latrine, she used to face a lot of diseases attacks. Her children used to suffer from diarrheal and other diseases all the year round. The expenditure relating medication was huge at that time, and it was a huge burden for their family indeed. As the Kacha toilet was not sanitary, germs could be spread easily. Not only her family but also the families of the neighbors were also in the same condition. They also had the same experience like Rubina Begum.

But with the BRAC sanitation program, she and other women from the village got the hygiene messages from WASH personnel. Now she and all of her family members wear sandal during defecation, keep soap and water inside the latrine, wash the toilets every day, drink safe drinking water from safe tube well, cover water and food pots, and wash hands with soap specially before having meal and after defecation. With the help of BRAC she has established a sanitary latrine in her house. Now her family is almost free from diarrheal and other abdominal diseases.

She had an experience of witnessing one mass rally at the Upazila Parishad where she found the participation of all levels of people highlighting the need for sanitation practices in day to day activities through demonstration of some visual aids like (posters, leaflets, banners, sanitary latrine models, usage of safe water and use of soap/ash after defecation and before taking meal).The Upazila administration, BRAC and other NGOs jointly organize a rally on the 'Sanitation Day'. The Upazila chairman, Vice chairmen, Upazila Nirbahi Officer and other departmental officers and local Union Parishad chairmen and concern NGOs and many people attended the rally. There she found BRAC's field officer Mr.Sirajul Islam, participating and distributing leaflets in the front of the rally.

Nevertheless, she has also some dissatisfaction. She does not have a tube well of her own. She has not got enough money to setup one for her family. She has to collect water from other tube wells at a distant place. She wish to start a small business like establishing a chicken farm, if soft loan from BRAC or other NGOs could be gettable as it has some conditions to fulfill.

### 4.3 Case Study: 02



## **Royeda Begum**

**(Female) Member of  
Doldoli UP)**

**Village: Musrivuja**

**Union: Doldoli**

**Post Office: Musrivuja**

**Upazila (sub-district): Bholahat**

**District: Chapainawabganj**

***Royeda Begum*** is the public representative (Women member of Doldoli) Union Parishad, and now she is the adviser of Village Wash Committee (VWC) of BRAC's WASH Program.

As a member she witnesses that BRAC and the DPHE are working together. She opines that the coordination among them is very nice and important.

Royeda (age about 30 years) comes from a well known family. She got married to Mr .Alam Mia. She joined as a teacher in BRAC School in the year 2010 and as an advisor of VWC in the year 2013.

She was trying to get a dignified income source from the beginning of her career and at last she got it. She joined in BRAC health program and there she knew about safe drinking water, hygiene knowledge and practices as well as to earn money as a teacher. She was becoming popular and favorite face in her locality. Recently in 2011, she contested in Union Parishad election and was elected as a 'women member' of Bholahat Union Council.

She said that, after becoming a public representative, she can work more for WASH program, because her acceptability in the society has been increased. She added that as a member she now can easily motivate the villagers especially the women. With the cluster meeting she spreads the message of sanitation in the village. As a Member she witness that BRAC and the DPHE are working together. She opines that the coordination among them is very nice and important. In selecting the pro- poor people she has to co-ordinate with BRAC, the Union Parishad chairman, and DPHE's officials.

She is very much grateful to BRAC for appointing her as a teacher. This profession gave another dimension of her career. The village people pay great heed to her words as she is a teacher and public representative. Recently she is the register of Women Development Forum and she will try to work for the poor and helpless people of her village with more enthusiasm and zeal.

#### 4.4 Case Study-03

### **Md.Sirajul Islam**

Upazila Manager

BRAC (WASH) program, Bholahat

**The personal relationship with the local heads of the Upazila administration matters much for better working environment. The proper follow up, monitoring and evaluating from different levels will make the program a successful one.**



**U**pazila Manager of WASH Program of BRAC, is currently working in Bholahat Upazila, Chapainawabganj. He has been working with BRAC's WASH Program for nearly nine years. He has the experience of working in three Upazilas in this sector. Those are Bogra sadar, Beergonj, Neelphamari Sadar Upazila. He said that, BRAC (WASH) has done many things on sanitation and hygiene.

Huge works are running on under WASH II Program. BRAC has already distributed 1668 sets of sanitary latrines, in the year 2014, 321 sets of ring slab latrines free of cost among the poor in 2015. They have built 04 sets of school latrines in 2013 and 6 school latrines in 2014 and 01 in the year 2015 in Bholahat Upazila. They have also installed many pieces of water seal or siphon in unsanitary latrines to convert it into sanitary latrine. He has informed that, Bholahat has some arsenic prone areas. People mostly depend on underground water for day to day life. There is demand for deep tube well here. However, many tube wells remain inoperative due to the lack of proper repairing/maintenance as poor people cannot afford to repair those. The sanitation coverage is around 12738 households which is 50% of the total coverage in the year 2015 up to June. Moreover, no arsenic testing has been done recently either from the government or NGO's side.

Mr. Sirajul Islam has given some exclusive observations regarding success of the WASH Program. He said that, all people do not have the same demands. Some people do not have tube wells, someone needs sanitary latrines, somebody wants loan to repair tube wells. And again some other may not have hygiene knowledge .He added that BRAC has conducted 193 VWC meetings in 2013, about 998 meetings in the year 2014 and 452 in 2015 till June. BRAC has



trained people 168 in 2014, number 72 in 2015, and organized total 3 Rallies in 3 years. (2013, 2014, 2015). And 220 people got 1500 taka loan each from BRAC Bholahat office for establishment of sanitary latrines.

Poor and grass roots level people demand their needs to the field officials as they go close to them. However, field officers cannot fulfill all the needs they demand as they have no sufficient allocation of money for all components. But it is the reality. We have to work with our limited resources for maximum utilities.

The success also depends on proper coordination with local administration and other NGOs working in the same areas. The Upazila coordination meeting, the Watsan meeting, the Upazila NGOs coordination meeting, these are the platform of collaboration /coordination of the government and NGOs. The personal relationship with the local heads of the Upazila administration matters much for better working environment. The proper follow up, monitoring and evaluating from different levels will make the program a successful one. And Bholahat Upazila has shown that in reality.

#### **4.5 Case Study-4**

**Mr. Shahinul Hoque, Sub Assistant Engineer, Department of Public Health, Bholahat Upazila.**

Mr. Shahinul Hoque is working in Bholahat Upazila in Chapainawabganj district. He is now 38 years old. He had worked in Shibganj Upazila, Godagari Upazila in Rajshahi district and had nearly 9 years of experience in this field. He told that the distribution of latrines in the year 2013 was 90 sets and in the year 2012 the number was 80. The DPHE gave 51 tube wells in 2014, pieces 55 in 2013. The organization of 3 rallies in 2015, and in the year 2014 the number was six. He said that his department has the huge responsibility of 100% sanitation coverage in the Upazila. Upazila Nirbahi Office and other departmental officers work for the sanitation but for their other responsibilities they could not give full dedication to this sector. Same thing also in the case of public representatives. But with all limitations, Bholahat has got 100% of sanitation coverage in 2003. It has become possible

by the effort of all concerned .BRAC is one of the NGOs working in the sanitation sector for a long time. According to Sub Assistant Engineer, BRAC's success mostly depends on their field program like meeting, motivating the people, visiting households, school program etc. He further added that the hardware support should be increased more as it has a huge demand. BRAC often works with the ready (pre prepared) program .When they start working in an area, they inform the local administration. Before working in an area, scope of coordination is needed for all concerned parties, so that the overlapping of the government and BRAC's activities can be avoided. In school sanitation, BRAC gives priority in the high school level and DPHE emphasizes on primary level. DPHE tests arsenic, if someone asked for the particular test. Arsenic test was last done in the year 2003, though it is continuous process. BRAC informs the DPHE officials in most of their sanitation programs. In any sanitation program like distributing the latrines goods, giving loans BRAC invites local Upazila chairman, Vice chairman, Up chairman, DPHE officer other local elites and concerned Upazila Nirbahi Officer which is a good practice indeed. This approach is very helpful to bridge the gap between Go-NGO activities. The coordination basically happens in this way. Both BRAC and local administration have good understanding and communication for proper implementation of sanitation program.

## 4.6 Findings of the study

- ✚ BRAC's sanitation program has made people aware of hygienic knowledge and good hygiene practice as a part of their strategic component. Poor people, especially women have become very cautious and serious about the use of sanitary latrine, cleanliness of latrine regularly, washing hands before preparing ,serving and taking foods, and of course after defecation. After learning from BRAC, the knowledge is shared to all –this is a great advantage for any successful program.
- ✚ BRAC's WASH program is well flourished in the Upazila. The cooperation and collaboration of BRAC office and the Upazila administration are visible even to the ordinary people.

- ✚ The overall health condition has changed positively after the advent of BRAC sanitation program in the Upazila.
- ✚ The staff of BRAC is very active and professional. Their presence is felt in the field level. Even the grass roots people can recognize sanitation staff; they are well acquainted to all in the locality.
- ✚ The public representative can be very successful, if they are involved in sanitation program because they have easy acceptability among the people. People pays heed to them and they can motivate people easily. The involvement of political leaders and their commitment is also an important success factor.
- ✚ The demand of the people is not always the same. Some do not have tube well, some need sanitary latrines, somebody wants loan to repair tube well and some other may not have hygiene knowledge. So the components of the program (tube well, latrines, hygiene knowledge) should be area and beneficiary specific according to their demand.
- ✚ As demand is huge and resource is limited that is why sometimes the field officers and program assistants cannot fulfill the people's demands due to the lack of allocation of money for all components.
- ✚ BRAC's success mostly depends on their field program like meeting, motivating the people, visiting households; school program etc. In this aspect, the hardware support should be increased more as it has a huge demand.
- ✚ When BRAC starts working they inform the local administration. Before working in an area, coordination is needed for all parties/stake holders, so that the overlapping of the government and BRAC's activities can be avoided.
- ✚ The Upazila coordination meeting, the Watsan meeting, the Upazila NGOs coordination meeting, these are the platform of collaboration /coordination of the government and

NGOs. The personal relationship with the local heads of the Upazila administration matters much for better working environment. The proper follow up, monitoring and evaluating from different levels will make the program a successful one. And Bholahat Upazila has shown that in reality.

- ✚ In any sanitation program like distributing the latrines goods, giving loans, orientation meetings BRAC invites local Upazila chairman, Vice chairman, Up chairman, other local elites and concerned Upazila Nirbahi Officer which is a good practice. This approach is very helpful to work together for the program's success..

## **4.7 Data Analysis from the Questionnaire:**

The questionnaire consists of total 20 questions of which there are some questions on demographic profile and sanitation. Data taken from demographic profile and sanitation related information from the respondents are analyzed below:

### **4.8 Analysis of Demographic Profile**

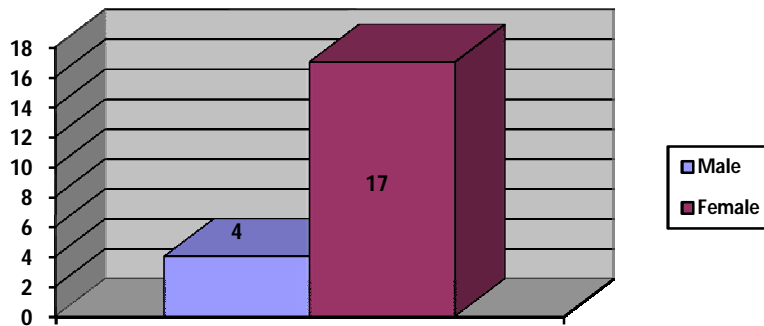
#### **Respondent's Gender**

From the 21 respondents, there are only 4 males and 17 females. The percentage of male and female are 19.04 and 80.95 respectively. The percentage of female respondents is high because, they are easily available at home while collecting data and they know well about the sanitation and hygiene issues compared to men. Female are responsible for household management in the society.

**Table no: 11 : Respondent's Gender**

No	Respondent's gender	Frequency	Percentage
1	Male	4	19.047
2	Female	17	80.952
<b>Total</b>		<b>21</b>	<b>100%</b>

The bar chart below shows that females occupy most of the respondents numbers .They are 17 persons out of total 21 persons in the maroon box.



***Figure:06 Respondent's Gender***

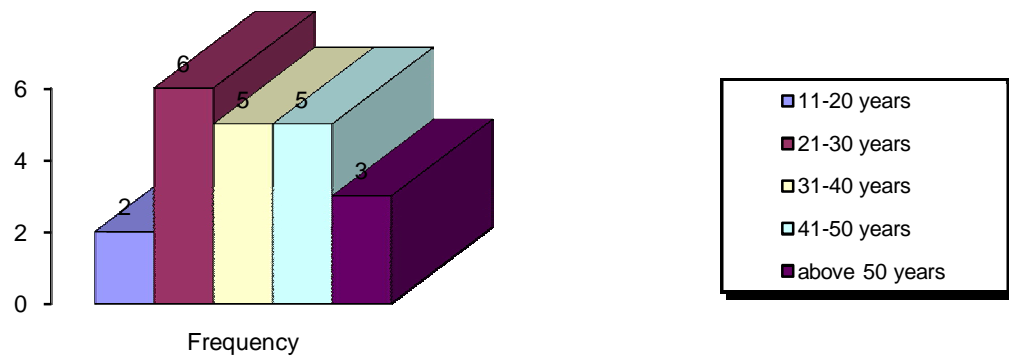
**Respondent's Age Group**

There are five age groups for the respondents. Among them the highest numbers of respondents are around (21-30) years old. It is notable that the range of most of the respondent's age is 21-50 years, who are in the productive stage of life. Only 3 respondents have been taken from above 50 years segment and only two respondents have been taken from 11-20 years segment. So it is clear that, most of the respondents are matured and experienced and well acquainted with the overall situation.

**Table no: 12 : Respondent's Age Group**

No	Age group	Frequency	Percentage
1	11-20 years	2	9.52
2	21-30 years	6	28.57
3	31-40 years	5	23.80
4	41-50 years	5	23.80
5	above 50 years	3	14.28

The below bar chart presents the frequency and the ranges of age in different colors. The major part of the range is shown in maroon color. The difference in each bar is clear in the graphic presentation.



**Figure: 07 Respondent's Age Group**

**Respondents Marital Status:**

Among 21 participants 19 persons are married and the rest of them are unmarried.

**Table No:13 : Respondents Marital Status:**

Number	Married	Unmarried
21	19	2

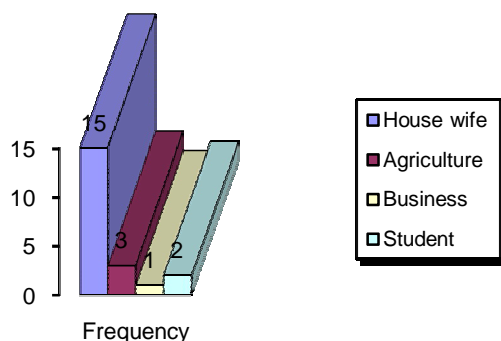
**Respondent's Occupation**

Total of the respondents have been categorized into four occupational groups. A major portion of the respondents are house wives of villages who usually do not engage themselves in any income generating occupation. Out of 21 persons 15 persons are house wives, and others are from business, agriculture and student occupation.

**Table no: 14 : Respondent's Occupation**

No	Occupation	Frequency	Percentage
1	House wife	15	71.42
2	Agriculture	3	14.28
3	Business	1	4.76
4	Student	2	9.52
Total			

The graphical presentation below indicates the state of occupation of the respondents. The major portion house wives are indicated by violet and other colors show different occupation level.



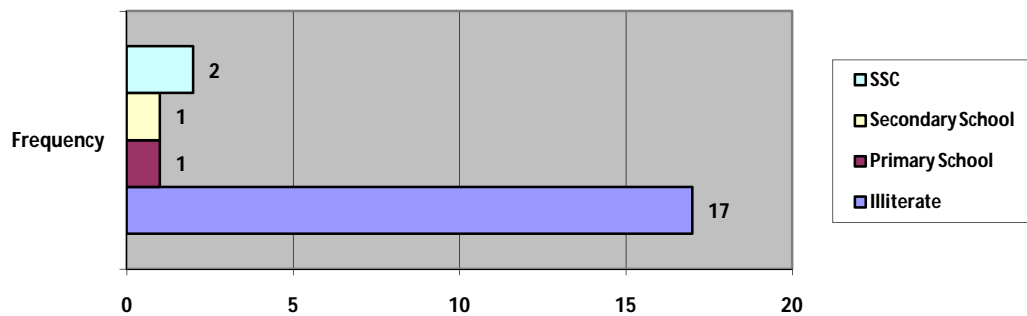
**Figure no:08 Respondent's Occupation**

From 21 respondents only two are student, while about 81% percent are illiterate and total 9.52 percent could not even cross the higher secondary level. So, the respondents in sample area have very low educational profile, as it was randomly selected from the locality.

**Table no: 15 : Educational Status of the Respondents**

No	Educational level	Frequency	Percentage
1	Illiterate	17	80.95
2	Primary School	1	4.76
3	Secondary School	1	4.76
4	SSC	2	9.52
<b>Total</b>			

The graphical presentation below indicates the state of educational qualifications of the respondents. The major portion illiterate is indicated by violet and other colors show different educational level.



**Figure: 09 Educational Status of the Respondents**

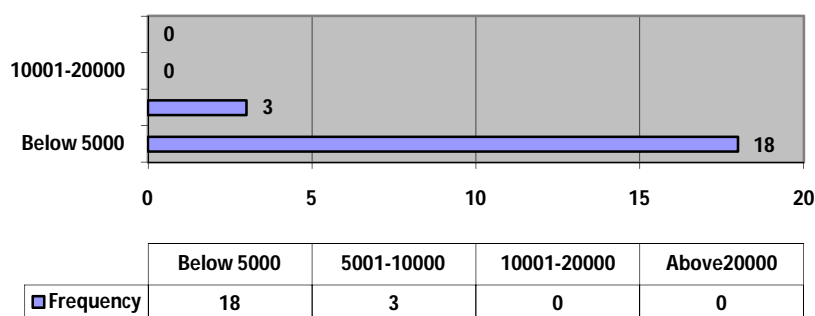
***Now let us see the economical status of the respondents;***



**Table no: 16 : Respondent's Income Level (Taka)**

No	Family income level	Frequency	Percentage
1	Below 5000	18	85.71
2	5001-10000	3	14.28
3	10001-20000	0	0
4	Above20000	0	0
<b>Total</b>		<b>21</b>	<b>100%</b>

Most of the respondent's (nearly 86%) family income level is below Tk.5000 per month. It indicates that most respondents are usually from the low income level that is very poor. So the respondents fulfill the criteria of BRAC's requirements of the beneficiary selection.



***Figure: 10 Respondent's Income Level (Taka)***

The bar chart clearly showing that only 3 persons are in the range of 5001-10000 level. The else are below the 5000 bar. Only 14.28 percent of the respondents are financially comparatively well. We can at least assume the economic condition of the people of that locality.

## **4.9 Sanitation Related Information**

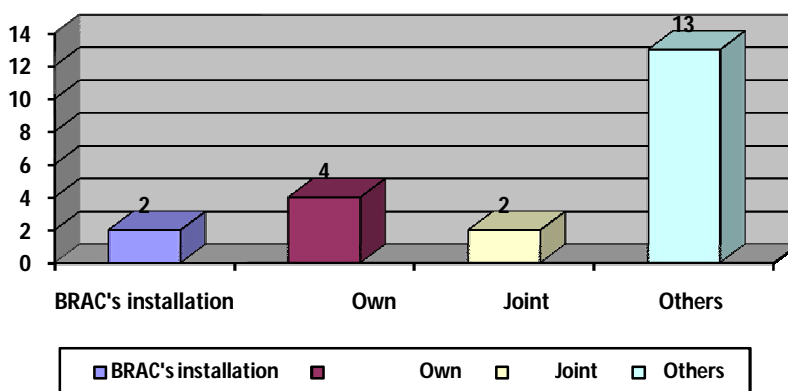
### **Tube well Ownerships**

The table and the bar chart below shows the ownership of the tube well that, now only 4 tube wells are self owned, while 13 are owned by other people and only 2 tube wells have been installed by BRAC's sanitation program. Jointly established tube well is only 2 in number.

**Table no: 17: Sanitation Related Information**

BRAC's Installation	Own	Joint	Others	Total Number
2	4	2	13	21

The bar chart below shows the various types of ownerships of tube wells in different colors. Most of the respondents use water from other's tub well. And BRAC's installation is not found in major portions.



***Figure: 11 Tube well Ownerships***

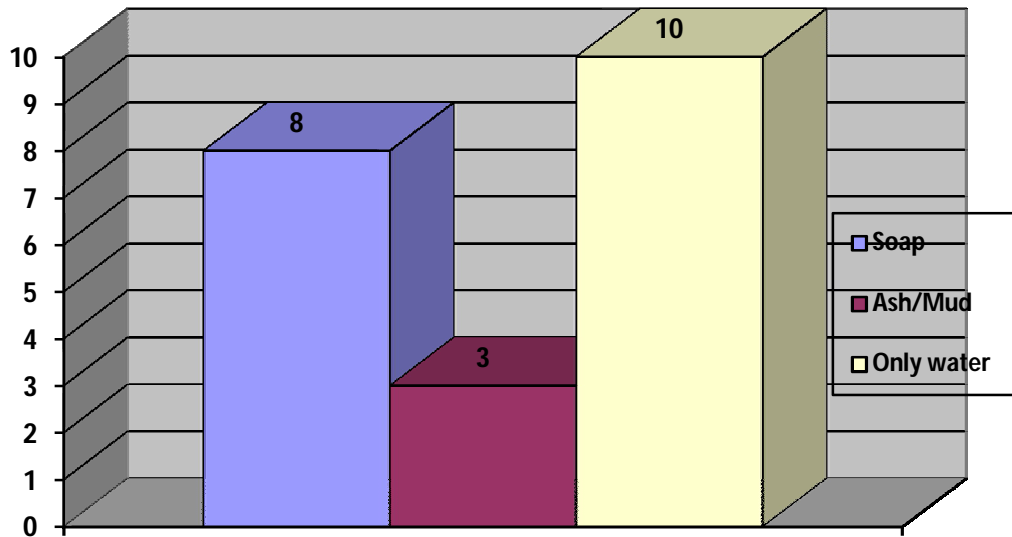
**Materials Respondents Use for Hand Washing after Defecation**

Hand wash is an important component of hygiene practice. The people of Bholahat Upazila before the advent of BRAC sanitation program, they were not conscious enough about sanitation and most of them did not know the effect and consequences of the bad practices.

**Table no: 18 :Materials Respondents Use for Hand Washing after Defecation**

NO	Hand washing items	Before Wash		After Wash program	
		Frequency	Percentage	Frequency	Percentage
1	Soap	8	38.09%	21	100%
2	Ash/Mud	3	14.28%	0	0
3	Only water	10	47.63%	0	0
<b>Total</b>		<b>21</b>	<b>100%</b>	<b>21</b>	<b>100%</b>

Therefore, they easily caught by the germs attack and ultimately suffered a lot by various diseases. BRAC’s strategic approaches like school program, meeting, visiting the households, spreading the knowledge through liftlets, posters and working with all the stakeholders with collaboration and cooperation helped to improve the scenario dramatically.



**Figure: 12 Materials Respondents Use for Hand Washing after Defecation.**

The graph obviously shows that before BRAC's sanitation program, only around 38.09 percent respondents used soap for hand wash with soap after defecation. 14.28 percent respondents used ash or mud and 47.63 percent respondents used only water. But for proper dissemination of hygiene messages effectively by the BRAC's sanitation staff with other agencies, the number of respondents using soap after defecation has now stood 100 percent. This is obviously an excellent achievement of the BRAC's staff and other agencies working in the hygiene sector.

### Types of Latrine Used (Before and after WASH Program)

**Table no: 19 : Types of Latrine Used (Before and after WASH Program)**

No	Latrine	Before Wash		After Wash program	
		Frequency	percentage	Frequency	percentage
1	Sanitary	8	38.09%	21	100%
2	No sanitary	7	33.34%	0	0
3	Open	6	28.57%	0	0
<b>Total</b>		<b>21</b>	<b>100%</b>		<b>100%</b>

The survey shows that, before WASH program, 8 persons from 21 persons that means only 38.09% percent respondents used sanitary latrines at home, 33.34 percent respondents used non sanitary which means out of 21 persons only 7 persons used non sanitary latrines. And before WASH program the consciousness about the sanitation was really disappointing because there was still 28.57% people used to defecate on the open latrines or who did not even use latrine for defecation. They did their defecation in open areas. BRAC's sanitation program has successfully changed the whole scenario. But if we see the after WASH program 21 persons out of 21, all used sanitary latrines. The success of the program is 100% as per the information of the field survey. The bar shows that 1.Sanitary 2.Non sanitary and 3. Open type of latrines in three different colors before and after BRAC's sanitation program.

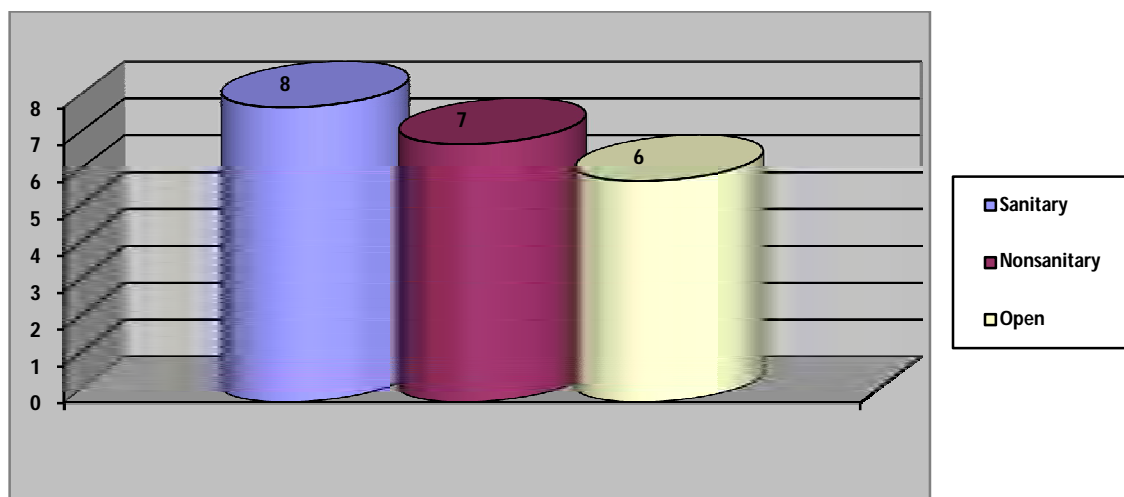


Figure: 13 Various Types of Latrine Used (Before WASH Program).

#### **4.10 The Strategic Progress of BRAC's Sanitation Program**

The strategies of BRAC's sanitation program are successful so far from the data analysis shown below. Here three components are selected for the purpose.

**Table no: 20 : The Strategic Progress of BRAC's Sanitation Program**

NO	Ways	Frequency	Percentage
1	Sanitary Latrine Establishment	15	71.44%
2	Motivated by BRAC	3	14.28%
3	Training by BRAC	3	14.28%
<b>Total</b>		<b>21</b>	<b>100%</b>

In the chart and diagram given above, we find that through BRAC's direct help 71.44% of the respondents established sanitary latrines in their households. Nearly 14% are influenced by BRAC to set up sanitary latrines and another 14.28% persons got the training from BRAC on sanitation. Every respondent is in the spheres of BRAC's strategic circles.

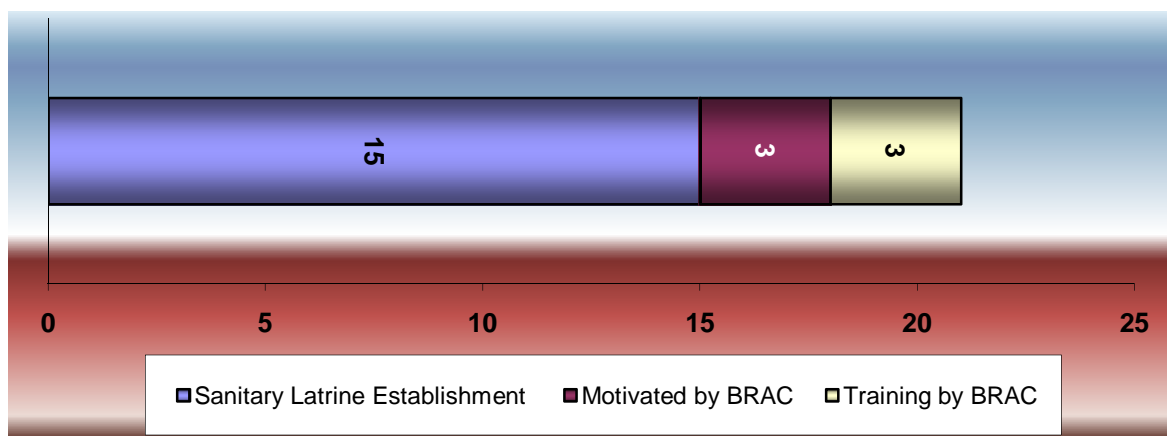


Figure: 14 The strategic Progress of BRAC's Sanitation Program

### **Coordination Among BRAC and Other Organization**

To achieve success, coordination and collaboration of various agencies are vital factors. In the BRAC's sanitation (WASH) program, Bholahat BRAC office has to work with different tiers of administration. We have Upazila Parishad, Union Parishad, local DPHE office and other NGOs as crucial entities. Our respondents are asked what they think about the collaboration and cooperation among the above mentioned local government bodies.

**Table no: 21: Coordination Among BRAC and Other Organization**

NO		Frequency	Percentage	Frequency	Percentage
1	Upazila Parishad	21	100%	21	100%
2	Union Parishad	21	100%	21	100%
3	DPHE Office	21	100%	21	100%
4	Other NGOs	21	100%	21	100%
<b>Total</b>		<b>21</b>	<b>100%</b>	<b>21%</b>	<b>100%</b>

From 21 respondents out of 21 said that the coordination is good, that means 100% is satisfactory from their view point.

## Satisfaction Level of the Respondents on Sanitation

Table no: 22 : Satisfaction Level of the Respondents on Sanitation

Total no of respondents	Quality	Frequency	Percentage
21	Satisfactory	6	28.58%
	Good	15	71.42%
	Bad	0	0
<b>Total</b>			<b>100%</b>

Out of 21 respondents, 28.58 percent respondents are satisfied with BRAC's sanitation program. 71.42 percent marked the activities of sanitation as good and bad is given zero percent that means all are either satisfied or feel good about the BRAC's sanitation program. BRAC and DPHE are doing their jobs with efficiency and effectiveness. All the respondents are well aware of the sanitation program going on in the Upazila. The different persons with different age and professions opine that they are well aware of BRAC's and the government endeavor on sanitation.

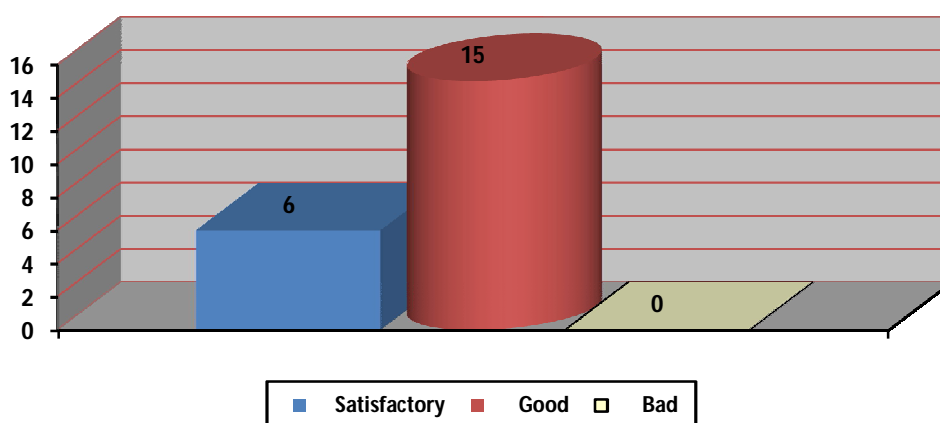


Figure: 15 Satisfaction levels of the respondents

The above graph presents the various level of people's observation on sanitation .The maroon color shows that the state of *good* impression in the people's mind about BRAC's sanitation program and the sky color box indicates that the level of *satisfaction* in the mind of people and the yellow color box is clearly showing that the *bad* is absent totally in the respondents opinion. (Range 0-16)

#### **Afflicted by Diarrhea and Other Related Diseases (Before and After WASH program)**

**Table no: 23 : Afflicted by Diarrhea and Other Related Diseases**

<b>Total</b>	<b>Before Wash</b>		<b>After Wash program</b>	
<b>No of persons</b>	<b>Frequency</b>	<b>percentage</b>	<b>Frequency</b>	<b>percentage</b>
<b>21</b>	<b>11</b>	<b>52.38</b>	<b>2</b>	<b>9.52</b>

As per the survey, nearly 52.3 percent respondents were afflicted by diarrhea and other related diseases year before BRAC's sanitation program. No one could be found from 21 respondents who were not afflicted by diarrhea in each year. Due to the continuous and effective activities of sanitation coverage by BRAC, DPHE and other agencies, the diarrheal and related diseases has reduced significantly. The impact of combined effort is evident here. At present, nearly 9.52 percent of the respondents are attacked by abdominal diseases and this is after the advent of sanitation program. So this clearly indicates that, sanitation program of BRAC and other agencies helped to improve the health condition of the people in sample the area -that is Bholahat Upazila.

#### **4.11 Major Findings from Data Analysis:**

1. Majority of the respondents of this study is female (80.95 percent). Their age range is within 21-30 years .They generally engage themselves in household activities as housewives (71.42%). They have no income generating occupation.



2. From the study we found that, most of the respondents' family income level (85.71%) is below Tk. 5000 per month and most of them have no educational qualification. This indicates that most of the respondents are poor and not literate enough (80.95%).

3. The People of Bholahat Upazila are mostly dependent on other person's tube well as the only source of drinking water. They use it also for cooking, washing; bathing and so on. Tube well by BRAC's installation is less in number from the respondents' information.

4. BRAC's WASH program is working to increase the knowledge of hygiene among the people of the locality. As a result, before the BRAC's sanitation program 47.63% of the respondents used only water after defecation but now the 100% of the respondents use soap after using toilet. It is indeed a huge success in terms of increasing the health knowledge and consciousness of the people.

5. Before WASH program, some latrines are found open and non- sanitary in the Upazila. Now, BRAC's sanitation program has successfully changed the whole scenario. We see that after WASH program 21 persons out of 21, all use sanitary latrines. The success of the program is 100% as per the information gathered from the respondents. But we should bear in mind that it is a continuous process.

6. From the various approaches of BRAC, sanitary latrine establishment is the highest in number (71.44%) and the presence of other approaches like motivation activities, training of the people of locality, meeting .etc -are also found in the data collected from the respondents.

7. To achieve success, coordination and collaboration of various agencies are vital factor. In the BRAC's sanitation (WASH) program, Bholahat BRAC office has to work with different tiers of administration. We have Upazila Parishad, Union Parishad, local DPHE office and

other NGOs as crucial entities. The collaboration of BRAC with other organization is excellent in the survey area as opined by the respondents.

8. BRAC and DPHE are doing their jobs with efficiency and effectiveness. All the respondents are well aware of the sanitation program going on in the Upazila. The different persons with different ages and professions told that they are aware of the BRAC's and the government endeavor on sanitation. The key note is that the message is known to all.

9. Sanitation program of BRAC and other agencies helped to improve the overall health condition of the people in the sample area named Bholahat .The respondents were afflicted by diarrhea and other related diseases before BRAC's sanitation program but now situation is much improved.

10. The respondents fall less sick after the emergence of BRAC sanitation program.

#### **4.12 Conclusion:**

This chapter is the core of the thesis paper. This study on WASH program in Bholahat Upazila has been conducted by two methods. The first one is data collection from twenty one respondents randomly selected from the Upazila. They are given a per-designed questionnaire to uphold their views on sanitation. Another method is the case study where, we analyze some of the views of selected people who are directly or indirectly related to the program such as BRAC's officials, DPHE officer, public representative and of course the beneficiary from the grass- roots level. By analyzing their behavior, attitude and experience, we can get their depth knowledge, opinions and observations about the sanitation program. We get many important information, comparative analysis and findings from this chapter which has unfolded some new arena of sanitation and its perspectives in general.

## Chapter 5

### Conclusion and Further Scope of Study

#### 5.1 Discussion

Undoubtedly it can be said that BRAC's WASH has made a substantial contribution to the nation's Millennium Development Goal (MDG) targets for water, sanitation and health. And this will definitely continue to contribute to achieve the Sustainable Development Goals (SDGs) further. We all know now, the proposed post-2015 sustainable development goals comprise 6 elements and 17 Sustainable Development Goals (SDGs) with 169 targets. Water and sanitation have a new stand alone goal (SDG 6) with 8 targets. SDG- 6 not only includes targets for drinking water, sanitation and hygiene (WASH) but also for water resources management.

In Bangladesh to achieve MDGs goal, BRAC hygiene and sanitation program reached more than 66 million people, about half of the rural population. WASH has successfully worked to improve household sanitation by creating demand for hygienic latrines, while supporting the supply chain and local businesses. All these successes have been under pinned by a strong provision of service to the poor and ultra-poor as strategy of BRAC. BRAC uses unique hygiene promotion program focusing on universal use and sustainability of services in communities, households and schools-it is also another strategy of BRAC for getting success.

BRAC started its WASH program in 2006 to tackle contamination issues. The significant achievement of reducing open defecation now 1% is a major success of the country. The program goes through an intensive implementation strategy to reach rural population from all parts of life. Starting from individual household visits, cluster meetings, schools meetings, mosque forums, formation of village WASH committees promoting rural sanitation centers and regular advocacy workshops, observing *Sanitation Day* are the key successful implementation strategies of the program. Now let us see the activities of BRAC in the selected Upazila.

## **5.2 Sanitation in Bholahat Upazila**

BRAC has already distributed 1668 sets of sanitary latrines, in the year 2014, 321sets of ring slab latrines at free of cost among the poor in 2015. They have built 04 sets of school latrines in 2013 and 6 school latrines in 2014 and 01 in the year 2015 in Bholahat Upazila. BRAC has also conducted 193 VWC meetings in 2013, meetings no 998 in the year 2014 and 452 in 2015 till June. BRAC has trained people 168 in 2014, 72 persons in 2015, and total 3 Rallies in three continuous years (2013, 2014, and 2015). Apart from the WASH employees, they (VWC members) are also contributing a lot for the successful implementation of WASH Program in that area. WASH Program is running in Bholahat Upazila with the support of one Project Manager, one Program Officer (PO), three Field Officers, and 8 Project Assistants (PA). BRAC has also training and loan facilities for the people of the operating area.

- ❖ Training: From village WASH committee the chairperson including the members total 208 persons got training from BRAC training centers. And 80 students got training from BRAC on hygiene and cleanliness of latrines from BRAC's office.
- ❖ Loans: In the fiscal year of 2013-14, around 220 persons got BRAC loan facility for establishing sanitary latrines in their households.

## **5.3 Some Strategies and Approaches of BRAC in Bholahat Upazila**

- **Two-pit Sanitary Latrines**

BRAC's WASH has been providing two-pit sanitary latrines instead of single pit. In Bholahat Upazila the two pit sanitary latrines are used widely. The size of each pit allows it to last/use two years for a family of four to five. This two pits latrine can be used in rotation; when one fills up, the other one can be used, while content of the filled up pit is digested into organic fertilizer later on. This technological approach ensures good hygiene practices, along with a method for sustainable management of human waste still now.

- **Supply Sanitary Goods through Local Entrepreneurs**

To strengthen the capacity of entrepreneurs of sanitation in WASH operated areas is one important strategies to increase the access of sanitation materials to the community areas. BRAC has established and revitalized rural sanitation centers in each Union of the wash-operated areas by providing loans and technical assistance to these entrepreneurs. The WASH program continues to create demand for hygiene facilities, and the sanitation centers operate to ensure their steady supply. This is a successful strategy taken to reach the local people effectively indeed. In Bholahat, we have the same picture.

- **Activities of Hygiene Knowledge and Practices in Bholahat Upazila**

Primarily the WASH program has focused on tube wells and latrines installation. At the initial stage, the hygiene was not incorporated in the program .Hygiene was paid little attention as compared to other two components 'safe drinking water' and 'sanitation'. But without good hygiene practices, ensuring safe drinking water facility and proper sanitation will not be achievable. Hygiene education and knowledge prescribed by WASH Program are disseminated to the people of the Upazila by the following ways:

- **Delivering Hygiene Messages through Local Religious Spokespersons**

Local Imams (local religious spokespersons) have been delivering Khutba (sermons) across the Upazila, to provide hygiene messages, and to promote men's role in domestic responsibilities to reduce women's work burden. Imams are trained on hygiene issues so that they can deliver messages using preaching based on verses from the holy scriptures that refer to cleanliness and hygiene practices. BRAC also provides orientation to the leaders of other religions .This is present in all over Upazila.

- **Training of Teachers and Hygiene Lessons**

In order to sustain good hygiene practices, WASH conducts hygiene sessions through school teachers on a monthly basis. One male and one female teacher from each school are trained on the WASH program's issues and teaching methodology. The teachers are

provided with specially designed flip charts and posters in order to educate their students on health and hygiene issues. They develop an action plan for effective implementation of and follow-up on WASH activities, and are assisted by BRAC's WASH staff when required. Active since 2006, the BRAC's WASH program provides hygiene education and increases access to water and sanitation in 250 sub-districts of Bangladesh. It also complements efforts of the Bangladesh Government in its water and sanitation interventions. In Bholahat Upazila, earlier we mentioned that BRAC has trained people 168 in the year 2014, and only 72 persons in year 2015. But this training program is not sufficient. More training facilities should be given in the various segments of the society, more frequently.

- **Student Brigade and School WASH Committee**

Bholahat Upazila has Student Brigade and School WASH Committees. The school WASH committees and student brigades are established in the schools for better management and maintenance of the sanitation and hygiene facilities. Student brigades are responsible for proper usage and maintenance of latrines as well as the overall cleanliness of the school premises. They also work for the WASH promotion activities with the other students. Thus the sanitation message is flourishing from school premises to the families of the students, finally to the people of the locality.

**The Following Meetings are Supposed to be Regularly Held in Bholahat Upazila:**

- ✚ Women's Meeting: There are two Program Assistants (PA) in every Union. Everyday each PA has to arrange six meetings consisting of 10 women members per meeting.
- ✚ Children Meeting: One meeting every day with children of 50 households from the selected area/locality.
- ✚ Adolescent Girls Meeting: One meeting everyday with adolescent girl of 50 households.
- ✚ Juvenile and Gents Meeting: Every day one gents meeting and one juvenile meeting held for 50 households each supervised by a field organizer (FO).

## **Village WASH Committee**

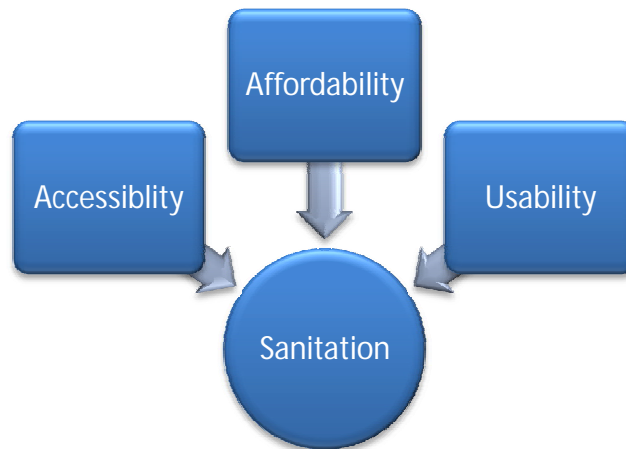
Each VWC is made up of 11 members – six women and five men – representing all stakeholder groups. The VWC operates the community an independent role to mobilize and keep track of WASH-related changes in the area. VWC conducts bimonthly meetings to assess the existing water and sanitation situation of the entire village and identify issues that need urgent action. They usually select sites for community water sources, collect money and monitor the latrine usage and maintenance. The committee members are also responsible for identifying ultra poor households in their communities .The committee members are further responsible for selecting poor households which qualify for microloan support to install sanitary latrines and tube well platforms. To strengthen the capacity of VWCs, two key members from each committee (one woman and one man) are provided leadership training at a BRAC facility. Through these committees, women’s empowerment is also addressed in the rural areas by recognizing women members through their voluntary contribution for the society. In Bholahat Upazila, BRAC has also conducted 193 VWC meetings in the year 2013, nearly 998 meetings in the year 2014 and 452 in 2015 till June.

- **Sanitation Month and Hand Wash Day**

The whole Bangladesh observes the month of October as the “National Sanitation Month”. In this year, it was observed in 252 sub-districts, 31 districts and some city corporations. National Task Force meeting organized by the Local Government Division was attended by all the stake holders including BRAC. On the Global Hand Washing Day (15 October), school children from all participating areas and members of more than 65000VWCs demonstrated proper methods of hand washing at the same time of the day. In our survey area that is Bholahat Upazila is not an exception of it .In this Upazila, the local administration and BRAC WASH Office with all the respective stakeholders organize and celebrate this program with great enthusiasms and zeal. These program of observing the sanitation month and Global Hand Washing Day remind us or renew our responsibilities and duties on sanitation coverage in the locality again.

## 5.4 Components of Sanitation in Bholah Upazila:

We should remember the three components of WASH program: These are:



**Figure No 16:** Components of Sanitation

**Source:** (Mollah M.M,2013)

If the poor people want to avail safe drinking water and sanitation facilities, he/ she has to satisfy three indicators; these are:-

- I. Accessibility
- ii. Affordability, and
- iii. Usability

Let us see that, how these three indicators' targets are achieved by the strategies taken by BRAC's, WASH program and the impact of the collaboration/cooperation with the local government agencies which will ultimately become very crucial factors of the success in the area of sanitation .The points below are discussed relating above diagram to give us a clear picture of the survey area:



- ✚ BRAC's sanitation program has made people aware of hygienic knowledge and good hygiene practice as a part of their strategic components. Poor people, especially women have become very cautious and serious about the use of sanitary latrine, cleanliness of latrine regularly, washing hands before preparing ,serving and taking foods, and of course after defecation. After learning from BRAC, the knowledge is shared to all with its various meetings, workshops, by going door to door to the people –this is a great advantage for any successful program .It helps to ensure the accessibility and usability for the people of the targeted area.
  
- ✚ BRAC's WASH program is well flourished in the Upazila, it is known to almost everybody. The cooperation and collaboration of BRAC office and the Upazila administration are visible even to the grass roots people. The poor people can have better accessibility, affordability and usability of sanitation program through the approach of collaboration with GO and NGOs.
  
- ✚ The overall health condition has changed positively after the advent of BRAC sanitation program.
  
- ✚ The staffs of BRAC's WASH are very active and professional. Their presence is felt in the field level. Even the ordinary people can recognize sanitation staffs; they are well acquainted to all in the locality. This has a positive impact on the Upazila concerning sanitation coverage.
  
- ✚ The involvement of public representative can be very successful, if they are involved in sanitation program because they have easy acceptability among the people. People pay heed to them and they can motivate them easily. The involvement of political leaders and their commitment to the program are also very important success factor without any doubt.
  
- ✚ The demand of the people is not always the same. Some do not have tube well, some need sanitary latrines, somebody wants loan to repair tube well and some other may

not have hygiene knowledge. So the components of the program (Tube well, latrines, hygiene knowledge) should be area and beneficiary specific according to their demand. Before the formulation or the implementation of strategy, we should consider these different types of demand meticulously and try to fulfill those as per the implementation process.

- ✚ BRAC's success mostly depends on their field program like meeting, motivating the people, visiting households; school program etc, these help to ensure the usability. In this point, the hardware support should be increased more as it has a huge demand. Hardware like providing ring slabs, commode for toilet, siphons, pipes, fencing etc should be provided more to the demanding people which will ultimately help to cover the gaps in the sanitation coverage in Bholahat .Loans and financial supports will increase the affordability and accessibility of the local people.
  
- ✚ BRAC's WASH launches its various programs like distributing the sanitary goods, or other public awareness functions; they inform the local administration to participate in the activities. Before working in an area, coordination is needed with all parties/stake-holders .So that the overlapping of the government and BRAC's activities can be avoided. In the survey area, we find a cordial and warm collaboration with BRAC and local administration, and this relation makes many problems easier to solve. Ultimately this results in achieving the success in sanitation coverage.
  
- ✚ The Upazila coordination meeting, the Watsan meeting, the Upazila NGOs coordination meeting, these are the platform of collaboration /coordination of the government and NGOs. The personal relationship with the local heads of the Upazila administration matters much for better working environment. The proper follow up, monitoring and evaluating from different levels will make the program a successful one. And Bholahat Upazila has shown that in reality.

- ✚ In any sanitation program like distributing the latrines goods, giving loans, orientation meetings etc BRAC invites the public representatives like MPs, local Upazila chairman, Vice chairman, Up chairman, other local elites and concerned Upazila Nirbahi Officer which is a good practice indeed. This approach is very helpful to bridge the gap between Go-NGO activities. The political commitment of the public representatives will ultimately boost the program in a positive way. This is the demand of time.

Bholahat Upazila in Chapainawabganj district is a remote area, nearly 60 kilometers away from the Sadar or headquarter. WASH Program in this study area is continuing WASH activities there still now. The objective of this study is to find out whether WASH program is benefiting the health conditions of the people or not. For this purpose, a questionnaire was developed that consisted of total 20 questions .The respondent's demographic profile and their drinking water, sanitation facilities and hygiene practices and the coordination efforts are asked in the questionnaire . Case studies have been taken from beneficiaries, field assistants, DPHE officer and project authority to get in depth knowledge and to know ins and outs as well as flaws and facts of this program.

This research has some observations/recommendations for the study area by analyzing data from questionnaire, facts and findings from the case studies, reports from the field officers and other studies during survey.

## 5.5 Recommendations

**Upazila Parishad's General Meeting:** Upazila Parishad has a strong monthly meeting provision. In the monthly general meeting of the Upazila Parishad many decision are made concerning Upazila's development and progress. BRAC can use this as a progress and problem solving platform in the area of sanitation. All the 17 departments of the government such as Social Welfare Department, Upazila Family Planning and Health Department, DPHE, Engineering Department, Union Parishad chairmen etc along with Upazila Nirbihi Officer are the members of that forum. Upazila chairman is the chairperson in that meeting. Local MP is the advisor of that respective committee. The important

development agenda and crucial decisions are taken in the Upazila Parishad meeting. NGOs working in the Upazila on the microcredit, health or other sectors can utilize this platform for informing and problem solving arena, if they can address those through proper channel. But this opportunity is not used properly in many Upazilas.

Likewise, the involvement of the local Officer in Charge of the police station and Assistant Commissioner (land) of the particular area can be very beneficial for sanitation coverage.

**Upazila NGO-Coordination Meeting:** This is an important platform in the field of cooperation among the NGOs and the local administration. Respective Upazila Nirbahi Officer is the chairperson of that committee, and all the NGOs working in the Upazila are the members. This meeting is not regularly held in many Upazilas. Yet, this can be an important place for the coordination and exchanging views among the NGOs themselves and of course with the Upazila administration.

**Crash Program on Sanitation:** This is a crucial program but in many Upazila once it was over, the continuation of this program is not felt with much importance. In the crash program all sincere efforts are carried out by both GO-NGOs with sound collaboration and coordination which leads ultimate achievement of the sanitation targets. This crash program should take place more than one time for filling the gaps in the sanitation sector. In the survey area Bholahat, the Crash Program is not taken by the Upazila administration regularly. So it should be taken care of.

**Standing Committee on Public Health, Sanitation and Water Supply:** The Upazila vice chairman is the chairperson of the Public Health, Sanitation and Water Supply Committee of the respective Upazila. The major responsibilities of this committee are crucial such like formulation of planning for water supply and sanitation, selecting areas for implementations etc. This committee recommends the plans and projects of improving water and the drainage system in the Upazila and submits the proposals in the monthly Upazila general meeting. Local DPHE Officer is the member secretary of the committee. In many Upazilas, this committee is mostly inactive but this should be revived for the better performance in implementation and planning regarding Upazila sanitation.

**Involvement of More Public Representative:** The public representatives and the members of the local civil society are very important now a day for the success of any program. The respective MP, Upazila chairman, Vice-chairmen, Up- chairman and members of union Parishad should be involved and informed properly about the program. It is very much necessary for proper implementation of any program like sanitation. The political commitment and backups are very crucial for success of such a huge program. The influence of the local public representative is tremendous among the followers and undoubtedly the message conveyed by the political leaders is far more effective in many cases. So it is clear that the political commitment to create the social movement like sanitation is the demand of time.

**Usage of Digital Centers:** Every Union Parishad has Union Digital Centers where computer facilities with internet connection are available. People of the respective Union Parishad can access more than thirty government services from those Union digital centers. In Upazila level, we also have this type of digital centers. It is very delightful thing that almost all digital centers have projectors which can be utilized for conveying the hygiene and sanitation related messages to the people of the locality more easily. By using the digital facility NGOs like BRAC's WASH can organize some movies, drama, short film exhibition on sanitation, thus can communicate more effectively with the people of the locality. In our survey area that is Bholahat Upazila, we do not see this kind of collaboration and cooperation with the digital centers of Union and Upazila levels.

**Role of the Civil Society and Media:** Now a day the civil society and media have vital role in the social movement or any sort of huge program like sanitation coverage. The electronic media can mark the loopholes of the program and also it can flourish the news both positive and negative to the common mass. The civil society and the media are indeed the "watch dog" of the society. In any government or non-government program, the influence of those two sectors is very important. So, we should think about the involvement of all stakeholders to achieve the success-the media and the civil society must be there for the success of sanitation.

**Inoperative Tube Wells Repairing:** There are some inoperative tube wells owned by hardcore poor people, for the unawareness and lack of financial support these tube wells remain useless. BRAC's WASH authority can take more initiatives to make these tube wells operative. This initiative will help a lot to solve the problem of access to drinking water of hardcore poor.

**Use of Good Quality Materials:** Usually the people do not use good quality siphon or other materials. Many sanitary latrines become unsanitary when siphon or water seals are broken due to the use of lower quality siphon or water seal. So, siphons can be purchased centrally by WASH head office so that the standard quality can be ensured. Then, these can be distributed to the field offices according to the demand.

**Increase Manpower in BRAC's WASH and DPHE Office:**

In many BRAC's WASH offices, we have seen that there is shortage of man power/staff. But to operate the office properly the need of man power or sufficient staff is an unquestionable thing. We also see from our experience that in the government offices this problem is also present. Therefore, the number of working people should be increased for the sake of better performance of the sanitation program.

**Arsenic Test:** As per the report of Upazila DPHE office, the arsenic test was not done recently. The test is not done frequently in the Upazila level. According to this study many respondents do not know whether the tube wells from which they collect drinking water, are arsenic tested or not, though DPHE is responsible for arsenic testing of tube wells. They cannot do it extensively in field level due to the shortage of workforce. DPHE does the arsenic test, when someone brings sample water to the office, so a thorough 'arsenic test' of all the tube wells in the Upazila should be done immediately. BRAC's WASH program can take the initiative of doing a thorough arsenic test in this Upazila.

**Emphasis on Education and Income Generating Activities:**

In the Upazila level we have seen from the experience that where the education and the income level of the people are high the program like sanitation and health become more effective and successful. Because people of the locality then become more aware and conscious about the

health and hygienic issues. In our survey area, we find that the education and income level of the respondents is not satisfactory. Although BRAC is operating in health, microcredit and education areas but it seems that more can be done in those sectors. The income generating and education program for the people of the locality should be increased more by the government and NGOs initiatives. And it should be with proper collaboration with the Government agencies. The synergic approach can make the difference.

#### **Usages of Digital Devices in the Offices:**

Every Upazila office should be well equipped with laptop, projectors, internet connection and other digital devices so that Upazila manager can correspond with other offices and vice versa. By using the multimedia the WASH office can easily throw the message to the local people by showing movies, dramas and various types of presentations. If Upazila offices become equipped with modern digital devices, they can easily send their reports and maintain other correspondences and convey the sanitation message more effectively with less effort and time. This initiative will help to accelerate the program activities.

#### **Increase Hardware Support:**

BRAC's WASH should provide more hardware support in the operating area and Bholahat is not an exception of it. The establishments of more tube wells, sanitary latrines, distribution of the sanitary goods are needed to pay more attention by the authority. The ultra poor people can get the access of the sanitation facility, it should be ensured by both BRAC and the Government agencies. The right person can get the right thing, it must be ensured also for the success of the program.

#### **Proper Monitoring and Evaluating:**

Monitoring and evaluating stage is one of the most important factors of a program. In any program, paying much attention to the implementation areas and the proper monitoring systems are needed. Local BRAC office plays major role in monitoring the whole sanitation program. To ensure better program management, transparency and effectiveness of the funds should be taken care of. The WASH program has employed a range of monitoring approaches by itself, as well as by an external research division and BRAC's independent

monitoring divisions. The program's built-in monitoring and quality control unit monitors the program throughout the year, while BRAC's monitoring division independently monitors based on agreed time and set of indicators. In addition a Qualitative Information System (QIS) has been introduced to measure hygiene practices among the communities to help evaluate sustainability of its inventions. But in the government part, this monitoring system is not that strong. Because it is very difficult for the local DPHE office and the Upazila administration to monitor or evaluate the program, as they remain busy with other government functions. Therefore, it is now very much needed to establish a good monitoring system in the Upazila level including all stakeholders .If the Upazila monitoring system can be stronger in the way to rectify the errors swiftly, the program can see more success. Likewise evaluation should be done by the third party outside the implementation entity, thus can be more effective and efficient.

## **5.6 Conclusion**

Finally, we can say that from this research paper, we have a glimpse that BRAC's sanitation program is benefitting the sanitary condition- overall health condition of the people in the Upazila areas. And how the local administration is helping BRAC's WASH program to achieve the sanitation coverage in the survey area can easily be understood. To improve the whole sanitation scenario in the Upazila level, the collaboration of local administration, political commitment and engagement of all stakeholders are very important for getting success. The technical and strategical approaches taken by BRAC's WASH program, its effectiveness and loopholes are investigated throughout this thesis paper. In the Bholahat Upazila, BRAC's WASH is a successful story to tell. But the sustainability of this sanitation program should be kept in mind. However, this study will give impetus for further study related to water, sanitation and hygiene sector. Now our country is progressing towards the path of the development, by the year 2021, Government of Bangladesh has declared 'Vision 2021' with a target to make Bangladesh as a middle income country using Information and Communication Technology (ICT) and for the fulfillment of this we need to build our human capital. Furthermore, we need healthy and skilled manpower to grab the challenges and opportunities of the demographic dividend. We also have to achieve the sustainable goals on sanitation which are more exclusive and all pervasive than MDGs. This thesis is the pen picture of one



remotest Upazilas in the Rajshahi Division; the scenario may differ from Upazila to Upazila. But we can relate many things also. The problems and prospects are certainly be different but it is a fact that we have to go a long way to achieve our goals. Yet it will be possible if we all work together with the sense of true nationality in our mind .In the words of famous poet Robert Frost in his poem **“Stopping by Woods on a Snowy Evening.”**

The woods are lovely, dark, and deep,  
But I have promises to keep,  
And miles to go before I sleep,  
And miles to go before I sleep.

### **5.7 Further Scope of Studies**

In fact, BRAC’s sanitation program has many success stories to tell, but BRAC has several programs in education, microfinance, commercial, health and agricultural sectors in different countries of the world. Each program has some specific innovations, strategies and approaches to bring its success and the arena of collaboration with other entities. BRAC has become the largest NGOs in the world, for that reason BRAC’s success stories and its strategies and approaches are very important to share with other organizations. The holistic approaches like the government and non government involvement to get the success in sanitation coverage should be documented for future betterment of the program. As the researcher has time limitations so that it is not possible to address all pros and cons of the success stories. Therefore, there are ample opportunities for the researchers to work on BRAC’s sanitation in the Union level, other NGOs’ sanitation programs in the Upazila, collaboration and coordination scopes with various local Government agencies. These researches will be very helpful for our country as well as other countries of the world to attain the more pervasive future SDG targets regarding sanitation.

# Annexure 1:

## Questionnaire on WASH Program of BRAC

(All information collected in this study will be used only for the research purpose and the unanimity of the respondent will be ensured.)

(Please put a tick mark on the appropriate options)

1. Name:
2. Address
3. Respondents' gender :
  - Male
  - Female
4. Age level:
  - Below 10
  - Between 11 to 20
  - Between 21 to 30
  - Between 31 to 40
  - Between 41 to 50
  - Above 50
5. Marital status:
  - Married
  - Single
6. Occupation
  - Student
  - Business
  - Agriculture
  - House wife
7. Educational status
  - Illiterate
  - Primary School
  - Secondary School
  - SSC

**8. Family income (Monthly income, BDT)**

- Below 5000**
- Between 5001- 10000**
- Between 10001- 20000**
- Above 20000**

**9. Ownership of the tube well-**

- Self owned**
- Jointly owned**
- Owned by others**
- Installed by BRAC**

**10. The materials used for hand wash after defecation-**

- Soap**
- Ash**
- Water**
- Others**

**11. The types of toilet used in your house-**

- Sanitary**
- Open**
- Non-sanitary**

**12. BRAC's WASH is helping by-**

- Building a toilet**
- Giving loan**
- Motivating**

**13. The coordination/collaboration between BRAC's WASH and Local Administration is good with-**

- Upazila Parishad**
- Union Parishad**
- DPHE Office**
- above all**

**14. Overall satisfaction level of the respondent on WASH Program-**

- satisfied**
- Good**
- Bad**

**15. After WASH Program the latrine is-**

- Kacha**
- Pacca**

**16. Before WASH Program the latrine was-**

- Kacha**
- Pacca**
- Open**
- Other ways**

**17. Did you take any help from BRAC's WASH program to construct your toilet?**

- Yes**
- No**

**18. Does the Field Officer of BRAC's WASH come regularly?**

- Yes**
- No**

**19. The respondent participated in BRAC's programs such as-**

- Training**
- Meeting**
- Workshops**
- Rally**

**20. When does the number of afflicted by diarrhea and other related diseases increase? (Per year) After WASH Program or before WASH Program-**

- Before**
- After**

**Signature and Date of Data Collector**

**Thanks**

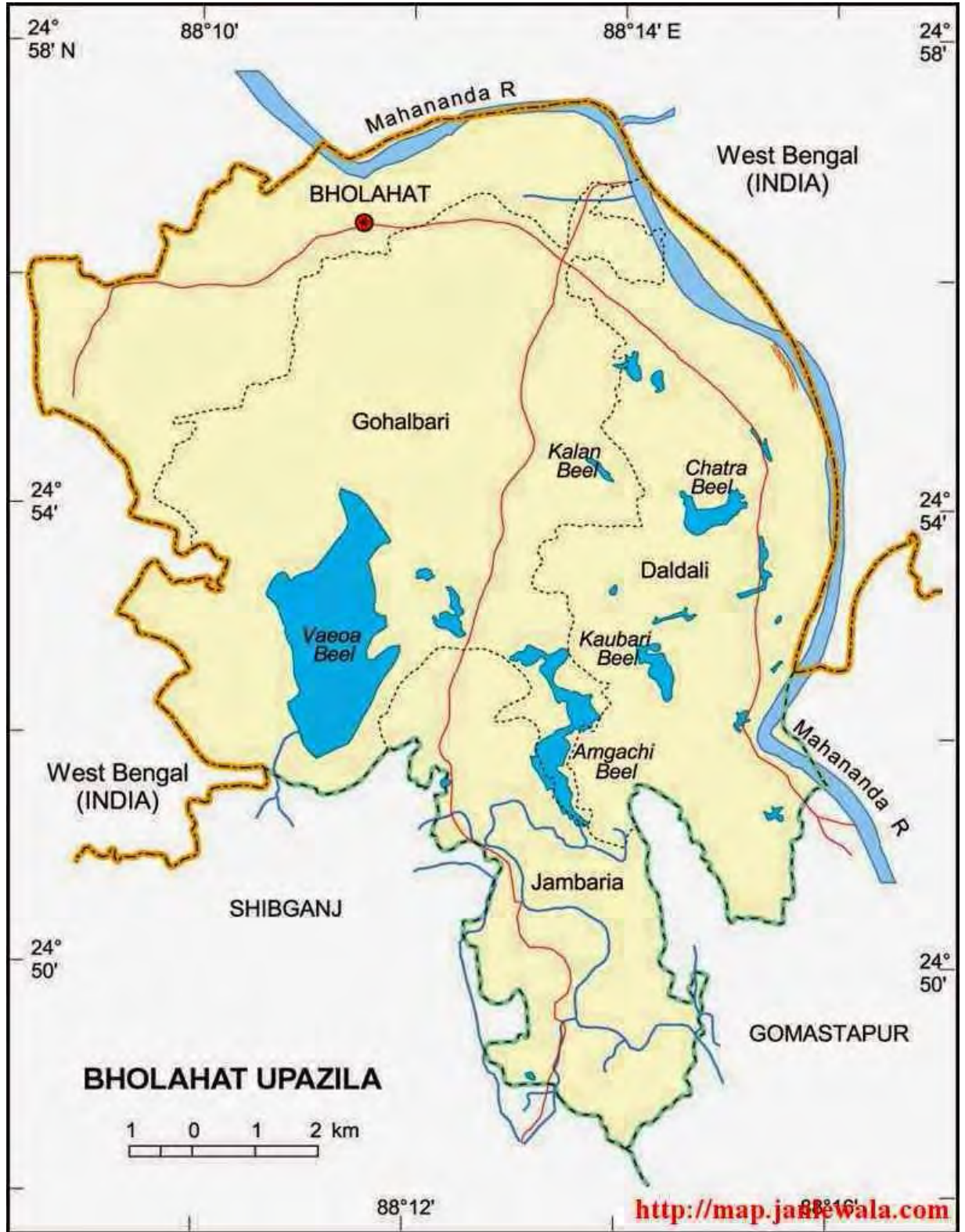
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**Bholaht Upazila's Map, Chapainawabganj District, Bangladesh.**







***Masters of Arts in Governance and Development***  
*6thBatch*  
*Institute of Governance Studies*  
*BRAC University, Savar, Dhaka.*

## ***Statement***

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**Kazi Ziaul Baset**  
**MAGD -6**  
**Student ID: 14272003**

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**Kazi Ziaul Baset**  
**MAGD -6**  
**Student ID: 14272003**

