Citizens' Report on Sanitation

Part-I: Summary Report

FANSA-BD

WSSCC-B

2011

Freshwater Action Network South Asia

WATER SUPPLY & SANITATION COLLABORATIVE COUNCIL

Citizens' Report on Sanitation

Part-I: Summary Report

Freshwater Action Network South Asia

WATER SUPPLY & SANITATION COLLABORATIVE COUNCIL

Contents

ABBREVIATIONS AND ACRONYMS

ADP	Annual Development Program
BBS	Bangladesh Bureau of Statistics
BUET	Bangladesh University of Engineering and Technology
CLTS	Community-Led Total Sanitation
DPHE	Department of Public Health Engineering
EA	Enumeration Area
FANSA	Freshwater Action Network South Asia
GLAAS	Global Annual Assessment of Sanitation and Drinking-Water
GoB	Government of Bangladesh
HH	Household
HTR	Hard to Reach
JMP	Joint Monitoring Programme
LGD	Local Government Division
LGI	Local Government Institution
MoLGRD&C	Ministry of Local Government, Rural Development & Cooperatives
NGO	Non-Government Organization
ToT	Training of Trainers
Unicef	United Nations Children's Fund
UP	Union Parishad
VGD	Vulnerable Group Development
WSSCC-B	Water Supply and Sanitation Collaborative Council-Bangladesh
WHO	World Health Organization

1 BACKGROUND

The striking findings of the national baseline survey conducted in Bangladesh in October 2003 led the government to launch a National Sanitation Campaign in order to achieve a rapid progress in sanitation coverage in the country and immediately realized that full sanitation coverage would not be possible without ensuring access of the hardcore poor to basic sanitation. The government earmarked 20% of Upazila (Sub-District) ADP (Annual Development Program) grant for sanitation for both motivational activities and 'hardware' subsidy for the hardcore poor. A multi-media awareness campaign was launched in the country to increase awareness about hygiene and sanitation.

Political Commitment has been a major driving force for achieving progress in sanitation sector of the country. Government's willingness to work in partnership with NGOs, development partners, civil society, media and private organizations have provided a wider platform for forming multi stakeholders partnerships that played a catalytic role and created a synergistic effect in achieving the goal of sanitation for all. With the initiation of the coordinated community sanitation campaign, also called "Community-Led Total Sanitation (CLTS) Approach" in 2003 among other approaches and the government declaring the national target of sanitation for all by 2013, the national sanitation campaign has been instrumental in achieving commendable progress in sanitation coverage.

The recent WHO-UNICEF Joint Monitoring Program (JMP) 2010 gives a more realistic and detailed figures including the usage pattern of population and shows that presently more than 54% of the population has access to improved sanitation facilities. Besides, 25% and over 15% of the population has access to shared and unimproved sanitation facilities respectively. This means that more than 94% of the population has access to latrine facilities irrespective of their quality. Less than 6% of the population currently practices open defecation which was 42% in 2003. This is a significant shift in people's behaviour from open defecation to fixed place defecation. This required a great strive of national commitment, enabling policies and strategies, responsive sector institutions, financing and particularly social mobilization initiatives to change people's behaviour towards safe sanitation, and partnership among stakeholders.

By all measures Bangladesh is making visible progress and this is reflected in the national coverage figures. However, national average data always conceals gaps that persist from place to place depending on hydro-geological and socio-economic contexts. It is important to stress that there are marked differences among and within districts, and between rural, urban and slum and hard to reach areas. Frequent natural disasters including cyclone, storm surge, flood, river erosion, and lack of awareness, lack of initiative, poor communication, poverty, inappropriate technologies are primarily responsible for disparities in coverage in difficult areas. An interesting point to be noted here is that the coverage figures are collected, collated and compiled, in most cases, either by government agencies or by non-government organizations or even by international agencies that vary significantly. An added complexity in Bangladesh is that different coverage figures are used

concurrently that raises confusions and differences in opinions among stakeholders. The variation is also due to the fact that different definitions are being used for hygienic, unhygienic and improved sanitation facilities.

In Bangladesh, one of the main causes of water borne diseases is fecal-oral transmission routes and hygiene practice is also very low. In such a situation it is extremely important that this contradiction and confusions regarding the statistics of sanitation coverage be sorted out and actual sanitation situation be unveiled. Grassroots National convention that was organized in March, 2010 came up with people's perception in 100 villages and observed that sanitation coverage is not more than fifty percent in Bangladesh. Coincidentally this figure is close to GLASS or BBS data.

In such a situation, FANSA-Bangladesh and Water Supply and Sanitation Collaborative Council-Bangladesh (WSSCC-B) has taken a joint initiative to conduct a scientific review of field situation for preparing a report on citizens' perception with reference to the sanitation coverage in proposed 300 villages representing seven divisions of the country. Given the time constraint, the target was later revised to consider 15 complete Unions (on an average 10 villages per Union) representing various regions of the country that will give a comprehensive data base useful for comparing government or other data bases and would reflect the views of about 300,000 people.

15 Unions have been selected from all seven divisions of the country and these include plain land with good access to infrastructures and hard to reach areas such as River Island, Wetland (Haor), Urban Slums, Coastal and Hill areas.

2 OBJECTIVES, APPROACH AND METHODOLOGIES

2.1 Objective of Citizen's Report

The objectives of the Citizen's Report are as below.

- To understand the perception of people and document observations on status of sanitation in selected areas;
- To determine sanitation situation in the selected areas focusing on sanitation coverage and systems used by extreme poor; and
- To understand the use of sanitation subsidy and availability of such subsidies to the extreme poor.

2.2 Study Area

A total of 15 Unions (on an average 10 villages per Union) were selected from seven division of the country. These include Hard to Reach (HTR) areas such as river islands, wetlands (haor), hilly areas, coastal areas and plain land. The list of Unions is given in Table 2.1.

TABLE 2.1: LIST OF UNIONS

Serial	Union	Upazila	District	Division	Area type
01	Charikata	Jointiapur	Sylhet	Sylhet	Teagarden
02	Jumarbari	Saghata	Gaibandha	Rangpur	Char
03	Saghata	Saghata	Gaibandha	Rangpur	Char
04	Charnar Char	Derai	Sunamgonj	Sylhet	Haor
05	Kalampati	Kaukhali	Rangamati	Chittagang	Hill tracts
06	Paler Char	Janjira	Sariatpur	Dhaka	Char
07	Chandshi	Gouranadi	Barisal	Barisal	Plain land
08	Char Katari	Daulatpur	Manikgonj	Dhaka	Char
09	Rajnagar	Rampal	Bagerhat	Khulna	Plain land
10	Subhadanga	Bagmara	Rajshahi	Rajshahi	Barind
11	Badarkhali	Barguna-S	Barguna	Barisal	Coastal
12	Kamarkhola	Dacope	Khulna	Khulna	Coastal
13	Chukaibari	Dewanganj	Jamalpur	Dhaka	Char
14	Nordas	Bagmara	Rajshahi	Rajshahi	Barind
15	Hasnabad	Monohorganj	Comilla	Chittagang	Plain land

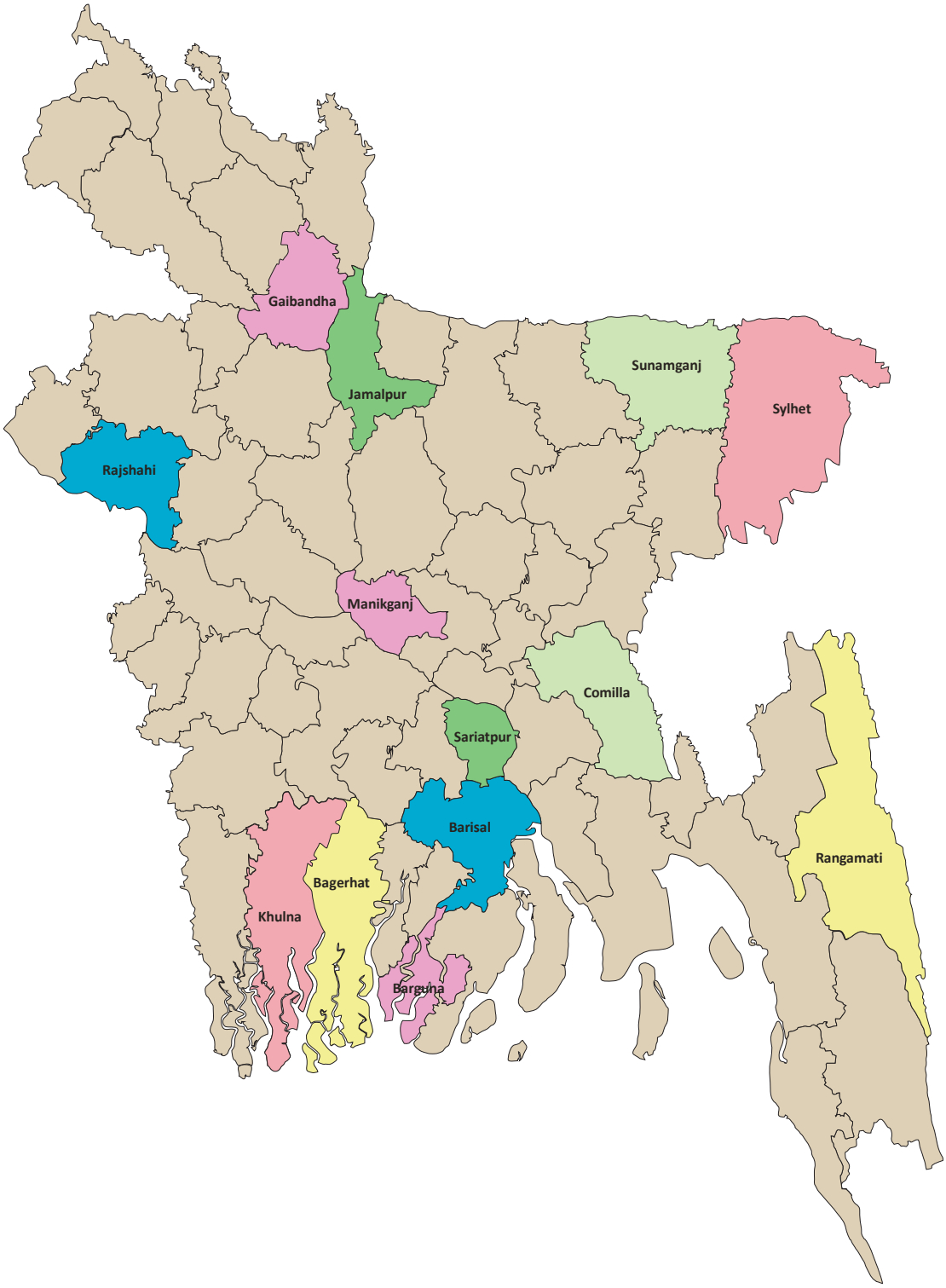

FIGURE 2.1: DISTRICTS OF BANGLADESH UNDER WHICH THE 15 UNIONS ARE LOCATED

2.3 Methodology

The census process of data collection was used in the study. The census is a total process of collecting, compiling, evaluating, analyzing and publishing or otherwise disseminating statistical data pertaining, at a specified time, to all living quarters and occupants thereof in a country or in a well- delimited part of a country. The role of census on the peoples' perception on sanitation is many, some of which are listed below.

- The census result can be used as a critical reference to ensure equity in distribution of wealth, government services and representation (e.g., for distributing and allocating government funds among various regions and districts for sanitation services).
- The census may also play an essential role in different elements of the national statistical system, including the various social components. Census statistics can be used as benchmarks for statistical compilation or as a sampling frame for sample surveys.
- The basic feature of the census is to generate statistics on small areas and small population groups with no/minimum sampling errors. While the statistics on the selected Unions areas are useful in their own right, they are important because they can be used to produce statistics on other geographical unit of similar nature. This versatile feature of the census is also invaluable for use in the private sector for applications such as business planning and market analyses.
- The census results are also expected to be used as a benchmark for research and analysis. A wide range of other users, including the corporate sector, academia, civil society and individuals can make use of the census outputs.

2.3.1 Essential features

The essential features of the census were individual enumeration, universality within a defined territory and simultaneity. In the census representative of each household was enumerated separately and the characteristics thereof were separately recorded so that the data on the various characteristics can be cross-classified. The requirement of individual enumeration was met by the collection of information in the field through questionnaire. The census covered a precisely defined territory (i.e Union, the lowest administrative boundary of Bangladesh) and covered every household in the territory. For Simultaneity, every household were enumerated as of the same well-defined point in time and the data collected maintaining a well-defined reference period. However, the time-reference period was not identical for all of the data collected and for most of the data, it was the day of the census.

2.3.2 Approaches

The census was conducted using the traditional approach to a census. The traditional census, though not always advantageous in terms of cost and time, has unrivalled merit in providing a snapshot of the entire population at a specified period and the availability of data for small geographic domains. In that sense, the traditional census is perhaps unique in nature. The approach comprises a complex operation of actively collecting information from every household

on a range of topics at a specified time, accompanied by the compilation, evaluation, analysis and dissemination of demographic, economic, and social data pertaining to well-delimited parts of the country. Members of the public responded to the census questionnaire for which interviewers were deployed to collect information from respondents. The enumerators assigned to different enumeration areas covered all households in the enumeration area during the specified short period of time in order to meet the requirements of universality and simultaneity.

2.3.3 Administrative organizations

In planning the organization and administration of the census, it is important to consider the role and relationship of the various executive and advisory organs. National and local commissions and committees were considered useful in the planning and preparations of the census.

The FANSA-BD and WSSCC-B were responsible for conducting and administering the census work that includes directing the field organizations during the preparatory work as well as during the enumeration. In order to provide immediate supervision in each area, the network member organizations acted as field offices at various levels. These offices were also responsible for staff recruitment and training at filed level. Supervisory personnel in these offices were persons who, being familiar with the particular area and the local language, are able to deal with local problems.

TABLE 2.2: LIST OF ORGANIZATIONS CARRIED OUT FIELD ACTIVITIES IN THE UNIONS

Serial	Union	Organization
01	Charikata	JaintiaShinnomulSongstha (JASHIS)
02	Jumarbari	Women Dev. Program (WDP)
03	Saghata	UnnyanSohojogi Team (UST)
04	Charnar Char	NGO Forum for Drinking Water Supply and Sanitation (DWSS)
05	Kalampati	NGO Forum for Drinking Water Supply and Sanitation (DWSS)
06	Paler Char	UnnyanSohojogi Team (UST)
07	Chandshi	Love Thy Neighbour(LTN)
08	Char Katari	NabolokParishad
09	Rajnagar	NabolokParishad
10	Subhadanga	Niskrity Foundation
11	Badarkhali	DushthaShasthya Kendra (DSK)
12	Kamarkhola	DushthaShasthya Kendra (DSK)
13	Chukaibari	Dhaka Ahsania Mission (DAM)
14	Nordas	Village Education Resource Center (VERC)
15	Hasnabad	Village Education Resource Center (VERC)

2.3.4 Questionnaire preparation

The census information collection involved direct, paper-questionnaire-based enumeration of the individuals. Careful consideration was given to set out the type of questionnaire, its format and the exact wording and arrangement of the questions. Among other factors the method of

enumeration, the type of questionnaire, the data to be collected, the most suitable form and arrangement of the questions and the processing techniques to be employed were taken into account in designing the questionnaire.

Attention was given to ensure that questions are free from ambiguity and not offensive. Care was taken to consider the reaction of respondents when designing questions. In addition, the questionnaire was kept short to maintain the quality of information collected.

2.3.5 Field tests

An important preparatory part of the census was questionnaire tests. The purpose was to test the suitability of intended census questions, including their formulation and the instructions provided, as well as the suitability of the questionnaire design. Such tests were helpful in assessing the suitability of the proposed material for enumerating specific subject matter, as well as the general public. These tests also assisted in estimating the time requirements in enumeration. The questionnaire tests were carried out on a small scale in several purposively selected places by FANSA-BD and WSSCC-B. Repeated rounds of questionnaire tests were carried out until a satisfactory questionnaire has been evolved.

2.3.6 Staff recruitment and training

Early arrangements are necessary to secure the proper number and type of personnel required for each of the various census operations. For reasons of efficiency and economy, it is important that the staff be selected on the basis of competence. The key personnel from the network partners' responsible for field operations were provided training of trainers (ToT) on the survey questionnaire and enumeration techniques. These offices recruited staffs in the field and provided training for carrying out the survey.

2.3.7 Enumeration

The canvasser (or enumerator) method was used in the survey where, information for each household was collected and entered in the questionnaire by a person designated to perform this operation in a specified area. The canvasser method was preferred as this is the only method that can be used in largely illiterate populations or in other population groups that may be unwilling to complete the census forms themselves or find it difficult to do so.

2.3.8 Data processing and analysis

No matter how thorough and accurate the census enumeration is, the usefulness, quality and timeliness of the census tabulations will suffer unless the collected data are properly processed. An important element of a successful processing operation is the close and continuing collaboration, at all levels, between the data- processing staff, and the subject-matter and the general statistical staff.

The procedure followed is arriving of the census documents in the processing centre in batches by period and enumeration area (EA). Maintenance of these batches throughout the data processing was done. Pre-coded responses were used in census questionnaires with numerical or alphanumeric codes being printed next to each category. There are obvious advantages to directly coding the respondent's answer into the questionnaire during the interview, since the respondent is still present to provide clarifications if necessary.

Data capture that is converting the information obtained in the census to a format that can be interpreted by a computer was a important part of data processing. Computer-assisted keyboard data entry method was used for this purpose. This was carried out using personal computer data entry programs (SPSS version 13) and with built-in logical controls. Some of the tasks accomplished by the programs are verifying that EA codes are valid, and copying them automatically from one record to the next; switching record types automatically if the program's logic requires it; checking that variable values are always within pre-determined ranges; skipping fields if the logic indicates doing so; and supporting keyboard verification of the information entered earlier.

Raw data files contain errors of many kinds, some generated by the respondents and others caused by enumerators who misunderstood the respondent's answer. Further mistakes are introduced in the data processing operations and during coding and data entry, or in the course of the transcriptions that take place. As many as possible of such errors were corrected. Prior to error correction operations and in case there is a need to go back over work, precautionary action were taken by making a back-up copy of the data file at every stage. Finally, in order to ensure the fullest possible utilization of census results by national and local governmental authorities, by academic researchers and by others, a comprehensive and coordinated programme of analytical studies was carried out.

3 SANITATION STATUS OF ALL 15 UNIONS

The 15 Unions selected for the study comprise more than **55 thousands of households** and around **250 thousands** of people. Table 3.1 shows Union wise total number of households and population. However, it should be mentioned that due to data validation process around 5% records has been excluded from analysis. Table 3.1also indicates that in the Unions on an average there are 4.5 people per household.

TABLE 3.1: UNION WISE NUMBER OF HOUSEHOLDS AND POPULATION

Serial	Union	Household	Population	Member per HH
01	Charikata	2,266	11,482	5.1
02	Jumarbari	5,497	23,793	4.3
03	Saghata	4,666	18,911	4.1
04	Charnar Char	4,998	25,500	5.1
05	Kalampati	1,168	5,953	5.1
06	Paler Char	1,631	7,650	4.7
07	Chandshi	2,854	12,212	4.3
08	Char Katari	2,483	12,729	5.1
09	Rajnagar	2,041	8,672	4.2
10	Subhadanga	6,367	25,101	3.9
11	Badarkhali	7,257	32,013	4.4
12	Kamarkhola	2,786	11,078	4.0
13	Chukaibari	2,590	10,978	4.2
14	Nordas	5,215	20,623	4.0
15	Hasnabad	3,301	20,226	6.1
	Total	**55,120**	**2,46,921**	**4.5**

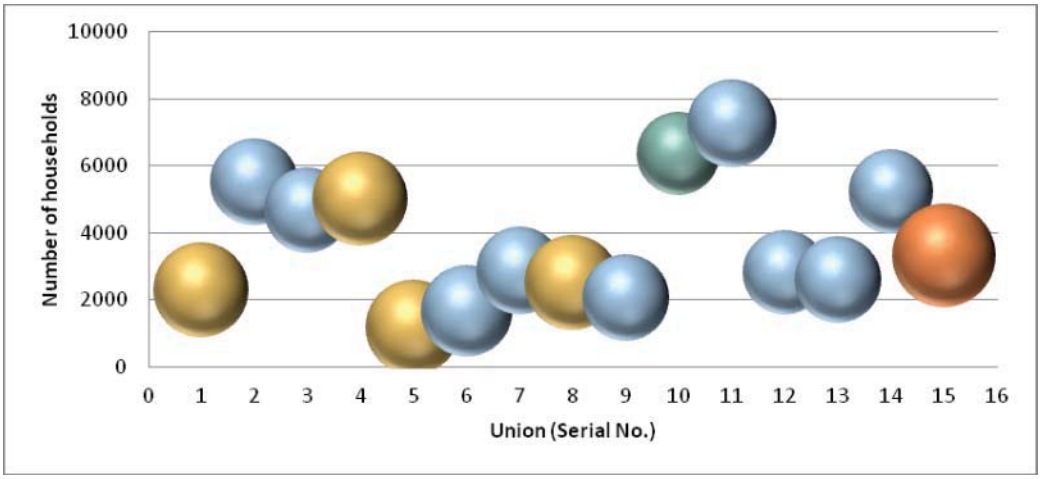

FIGURE 3.1: MEMBERS PER HOUSEHOLD (INDICATED BY BUBBLE SIZE) IN 15 UNIONS

3.1 General

In these Unions around 58.8% households are comprised of less than 5 persons and around 39.8% households have members in between 6 to 10. Rests of the households have more than 10 members in the family. Only 8% of the HH head in these areas are female. Most of the survey respondent (66.1%) was in the age group of 26 to 50. According to the interviewer 36.1% of the households in these Unions are hardcore poor. However, only 5.8% households have VGD card.

TABLE 3.2: AGE GROUP OF RESPONDENTS

Respondents' Age Group	Percentage
Below 18	1.4
18-25	13.3
26-50	66.1
51-65	13.7
Above 65	5.5

Monthly income of 10.4% HHs is less than 2000 taka and 38% HHs earn 2000 to 4000 taka per month. 25.4% opined that they earn more than 6000 taka and 18.5% expend more than 6000 taka per month for their livelihood. Around 25.3% households save more than 1000 taka per month and 24.5% HHs do not save any money. Table 2.3 shows monthly income, expenditure and savings scenario of the households.

TABLE 3.3: MONTHLY INCOME, EXPENDITURE AND SAVINGS OF THE HHS

Monthly Income (Taka)	HH (%)
Below 2000	10.4
2001 - 4000	38.0
4001 - 6000	26.2
Above 6000	25.4

Monthly Expenditure (Taka)	HH (%)
Below 2000	12.3
2001 – 4000	44.0
4001 – 6000	25.1
Above 6000	18.5

Monthly Savings (Taka)	HH (%)
0	24.5
1-500	32.5
501-1000	17.7
Above 1000	25.3

3.2 Sanitation

A good number of people (**64.9%**) in these Unions use hygienic latrine. However, **23.1%** HHs use unhygienic latrine and around **10.3%** practice open defecation. Among the latrine users, around 86.8% HHs use their own latrine out of which 31.3% are shared latrine. 50.6% of the shared latrines are shared by two HHs and rests are shared by three or more number of households. The feces of

the children are put in the latrine or in fixed places by 74.8% HHs and rest 25.2% HHs dispose children faces here and there.

TABLE 3.4: DEFECATION PRACTICE IN THE AREA

Sanitation option	Used by HH (%)
Pit latrine with slab and water seal or lid or flap	28.6
Pit latrine with slab but without water seal or lid or flap	26.9
Flush and pour flash latrine connected with pit or septic tank	9.5
Open/ Hanging latrine	23.1
Open defecation	10.3
Other	1.8

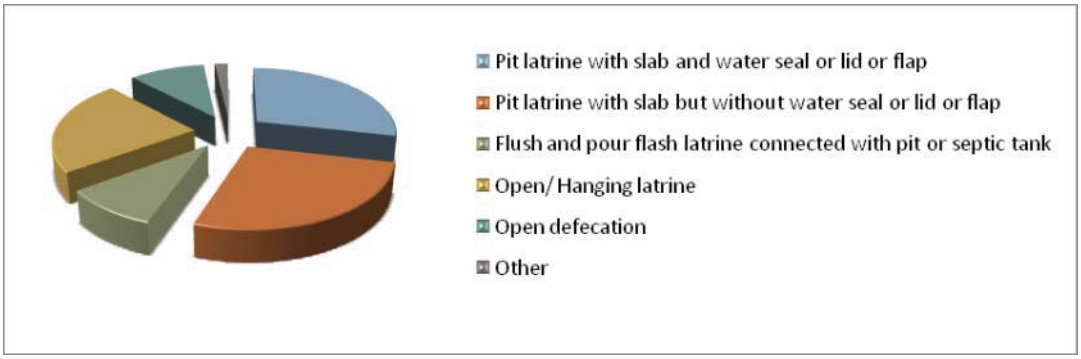

FIGURE 3.2: SANITATION OPTIONS USED BY PERCENTAGE OF HHS

86.3% of the respondents opined that they get sufficient water for using in the latrine. Around 53.3% respondents said that the water point from where they collect water for use in the latrine are within 30 feet, 32.2% respondents told the water point is within 30 to 90 feet and the rest 14.5% respondents said that the water point is located at a distance of more than 90 feet. Most of the HHs (76.8%) installed the latrines by themselves. Union Parishads provided latrines to 5.6% HHs. NGOs assisted around 13.3% HHs in installing latrines. Community people and others provided latrines to 4.4% people.

TABLE 3.5: DISTANCE OF LATRINE FROM WATER POINT

Distance (ft)	HH (%)
<30	53.3
30-60	26.5
61-90	5.7
90+	14.5

TABLE 3.6: ASSISTANCE FOR INSTALLATION OF THE LATRINE

Assistance for Latrine installation	HH (%)
Self	76.8
Union Parishad	5.6
NGOs	13.3
Community people	1.0
Other	3.4

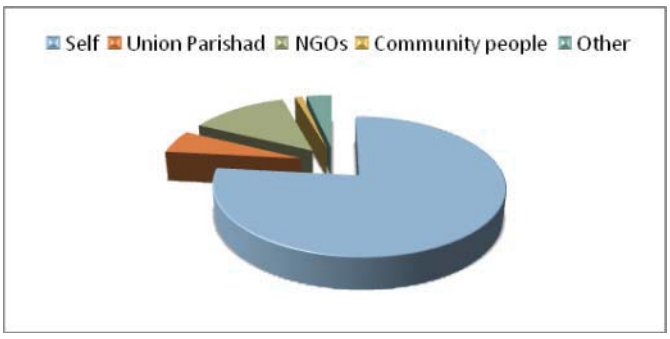

FIGURE 3.3: ASSISSTANCE TO PERCENTAGE OF HHS FOR LATRINE INSTALLATION

Around **78.4%** of the respondent knew that Government provides latrines to hardcore poor at free of cost. 60.6% respondents could recognize that people in the Union received latrines from UP. Around 55.8% respondents told that less than 5% HHs received latrine from the UP and 61.3% told that less than 10% of hardcore poor family received latrine from the UP. **60.4%** respondents agreed that all the families, those received latrines from the UP, are hardcore poor and the rests opined that not all the families were hardcore poor. The median values indicate that in view of the people of the union, **only 4% HHs and 2% hardcore poor HHs received latrines from the UP**. By 38.7% of the respondents, the reason for that was identified as lack of Government allocation and according to 38.3% respondents the reason was allocation of subsidized latrines to the nearest and dearest one of UP authority.

TABLE 3.7: PEOPLE PERCEPTION ON PERCENTAGE OF HOUSEHOLDS AND HARDCORE POOR HOUSEHOLDS RECEIVED LATRINE FROM UNION PARISHAD

HHs received Latrine from UP (%)	Respondents' opinion (%)	Hardcore Poor HHs Received Latrine from UP (%)	Respondents' opinion (%)

HHs received Latrine from UP (%)	Respondents' opinion (%)
5<	55.8
5-9	25.7
10-19	11.7
20-29	4.7
30+	2.2

Hardcore Poor HHs Received Latrine from UP (%)	Respondents' opinion (%)
0	22.7
1-9	61.3
10-19	7.5
20-29	2.7
30+	5.9

TABLE 3.8: REASONS FOR NOT RECEIVING LATRINES FROM UP BY HARDCORE POOR HOUSEHOLDS

Reasons	HH (%)
Lack of Government allocation	38.7
Fondness	38.3
Lack of awareness of the hardcore poor HH	13.7
Lack of interest by the hardcore poor HH	4.4
Lack of space	1.3
Other	3.6

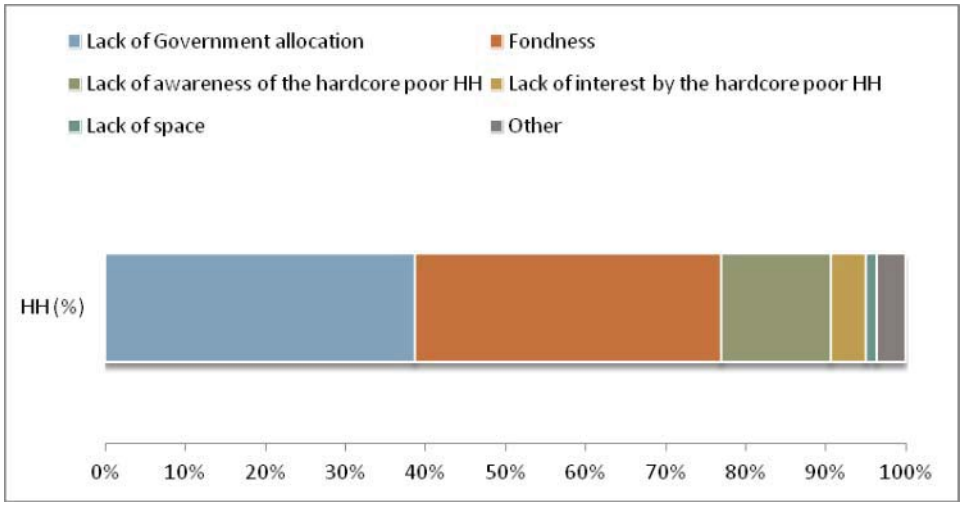

FIGURE 3.4: OPINION OF PERCENTAGE OF HHS FOR NOT RECEIVING LATRINES BY HARDCORE POOR HHS FROM UPS

TABLE 3.9: PEOPLE PERCEPTION ON SANITATION COVERAGE

Hygienic latrine coverage		Unhygienic latrine coverage		Open defecation	
Used by HH (%)	Opined by Respondents (%)	Used by HH (%)	Opined by Respondents (%)	Practiced by HH (%)	Opined by Respondents (%)

Hygienic latrine coverage	
<5	25.4
5-9	10.4
10-29	27.4
30-49	11.9
50-69	6.4
70-89	12.5
90+	5.9

Unhygienic latrine coverage	
<5	33.2
5-9	6.6
10-29	13.5
30-49	12.4
50-69	19.2
70-89	6.2
90+	8.9

Open defecation	
<5	42.4
5-9	10.9
10-19	20.8
20-29	14.5
30-39	5.3
40-49	2.8
50+	3.2

Around 63.2% respondents opined that hygienic latrine coverage in the Union is less than 30%. According to 33.2% respondent less than 5% HHs use unhygienic latrine and in the view of 42.4% respondents less than 5% people practice open defecation. The interviewer identified that most of respondents (92.9%) in the area have proper idea about hygienic latrine. The perception of those who have proper understandings about hygienic latrine are given in Table 3.9.

TABLE 3.10: PERCEPTION OF PEOPLE ON SANITATION COVERAGE WHO CAN RIGHLY IDENTIFY SANITARY LATRINE

Hygienic latrine coverage	
Used by HH (%)	Opined by Respondents (%)
<5	21.9
5-9	8.8
10-29	22.2
30-49	10.8
50-69	8.3
70-89	18.8
90+	9.2

Unhygienic latrine coverage	
Used by HH (%)	Opined by Respondents (%)
<5	34.4
5-9	7.3
10-29	18.1
30-49	10.7
50-69	14.2
70-89	6.2
90+	9.0

Open defecation	
Practiced by HH (%)	Opined by Respondents (%)
<5	44.6
5-9	13.2
10-19	18.2
20-29	12.0
30-39	4.5
40-49	2.8
50+	4.7

Based on survey conducted in all households, the view of the people in the area, taking the median values, is that the **hygienic latrine coverage is 21%** whereas **22% people use unhygienic latrine** and **8% people practice open defecation**.

4 COMPARATIVE ASSESSMENT

The comparative scenario of defecation practice of the households' of 15 Unions are presented in Figure 4.1. Also the latrine coverage as observed by the interviewer and opined by the respondents (median value) in these Unions are given in Figure 4.2, Figure 4.3 and Table 4.1.

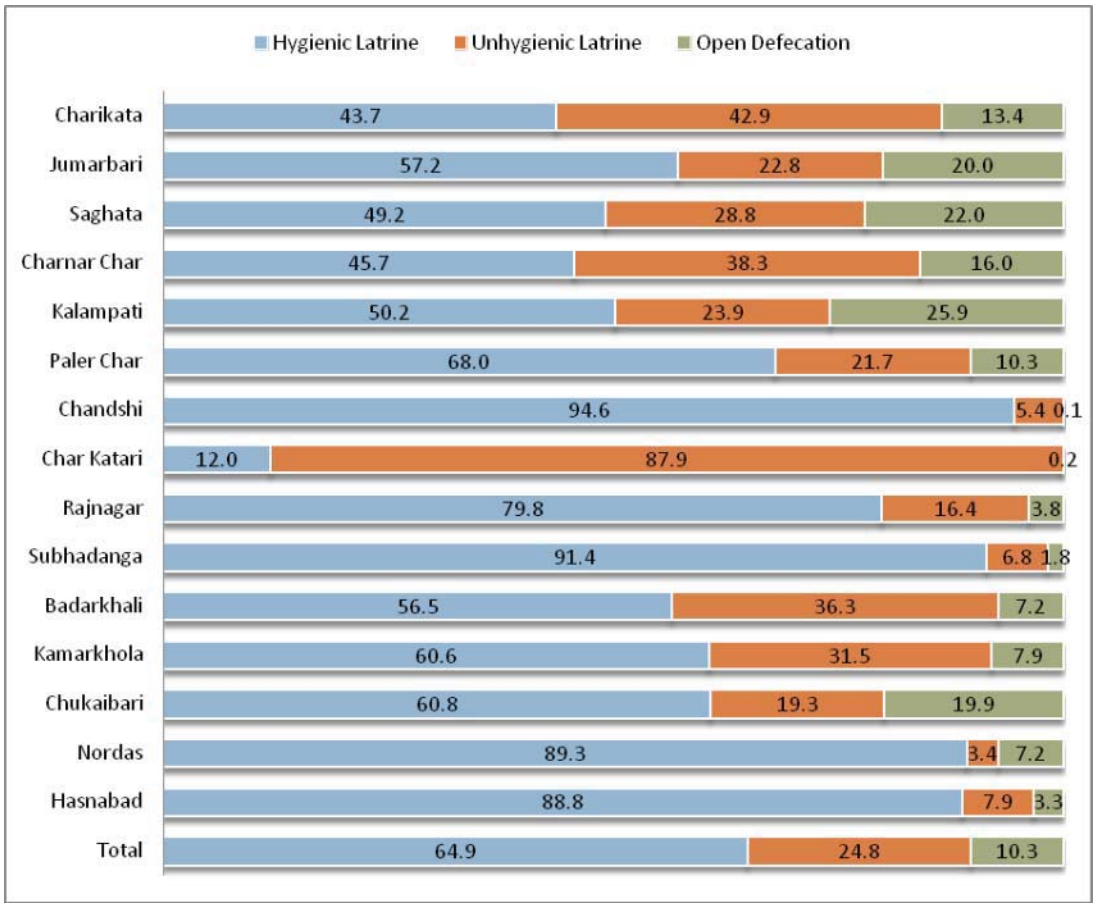

FIGURE 4.1: DEFECATION PRACTICE OF THE PEOPLE OF THE 15 UNION

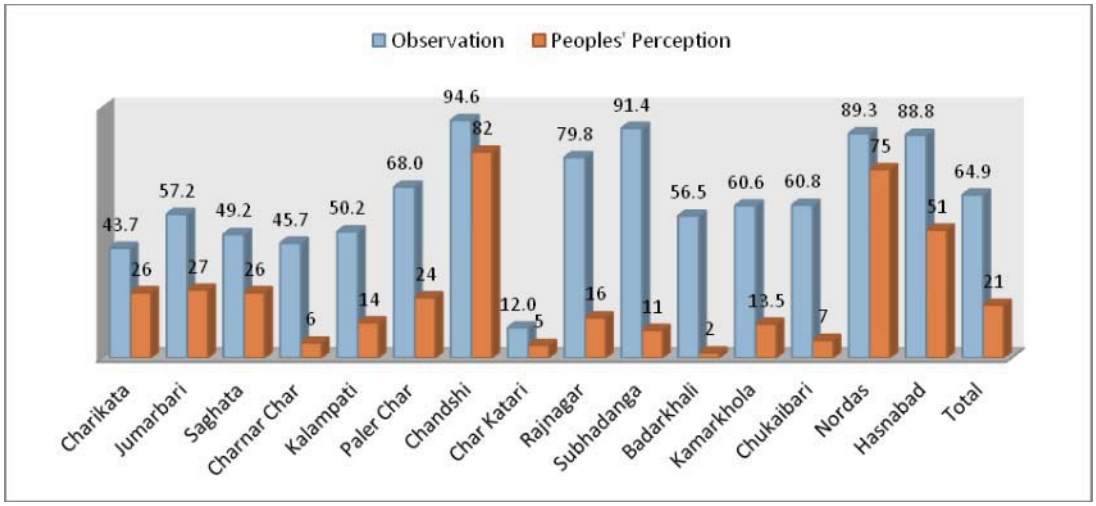

FIGURE 4.2: HYGIENIC LATRINE COVERAGE AS OBSERVED BY THE INTERVIEWER AND OPINED BY THE RESPONDENTS

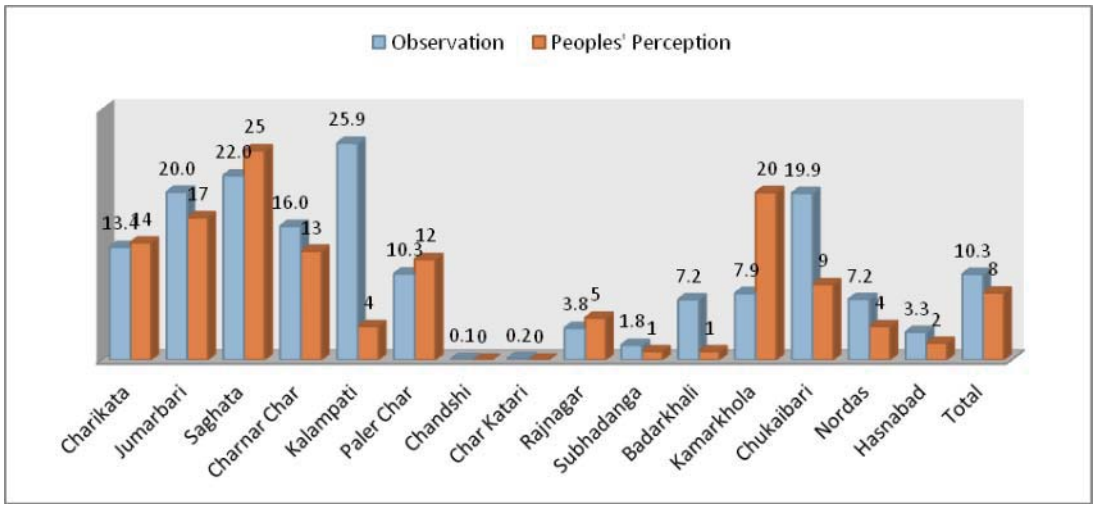

FIGURE 4.3: OPEN DEFECATION PRACTICE AS OBSERVED BY THE INTERVIEWER AND OPINED BY THE RESPONDENTS

TABLE 4.1: UNION WISE LATRINE COVERAGE

Serial	Union	Interviewers' Observation (%)			Respondents' Opinion (%)		
		Hygienic Latrine	Unhygienic Latrine	Open Defecation	Hygienic Latrine	Unhygienic Latrine	Open Defecation
01	Charikata	43.7	42.9	13.4	26	25	14
02	Jumarbari	57.2	22.8	20.0	27	56	17
03	Saghata	49.2	28.8	22.0	26	50	25
04	Charnar Char	45.7	38.3	16.0	6	57	13
05	Kalampati	50.2	23.9	25.9	14	3	4
06	Paler Char	68.0	21.7	10.3	24	52	12
07	Chandshi	94.6	5.4	0.1	82	18	0

		Interviewers' Observation (%)			Respondents' Opinion (%)		
08	Char Katari	12.0	87.9	0.2	5	95	0
09	Rajnagar	79.8	16.4	3.8	16	3	5
10	Subhadanga	91.4	6.8	1.8	11	1	1
11	Badarkhali	56.5	36.3	7.2	2	2	1
12	Kamarkhola	60.6	31.5	7.9	13.5	37	20
13	Chukaibari	60.8	19.3	19.9	7	9	9
14	Nordas	89.3	3.4	7.2	75	3	4
15	Hasnabad	88.8	7.9	3.3	51	2	2
	Total	**64.9**	**24.8**	**10.3**	**21**	**22**	**8**

Taking the median value of respondents' opinion, it seems that the perception of people of Char Katari and Nordas Union are closer to the observation of the interviewers regarding sanitation. On other hand the perception of Badarkhali and Subhadanga Unions' people on sanitation are more distant than the observation of the interviewers.

Among the 15 Unions in Nordas Union of Rajshahi District highest number of households (25.4%) that have VGD Card received latrine from the UP (Figure 4.4). On an average among the VGD Card holders' HHs, 13.4% received latrine from the UPs. However, according to the interviewers, as shown in Figure 4.5, around 47% of the households in these Unions that have VGD card are not hardcore poor households.

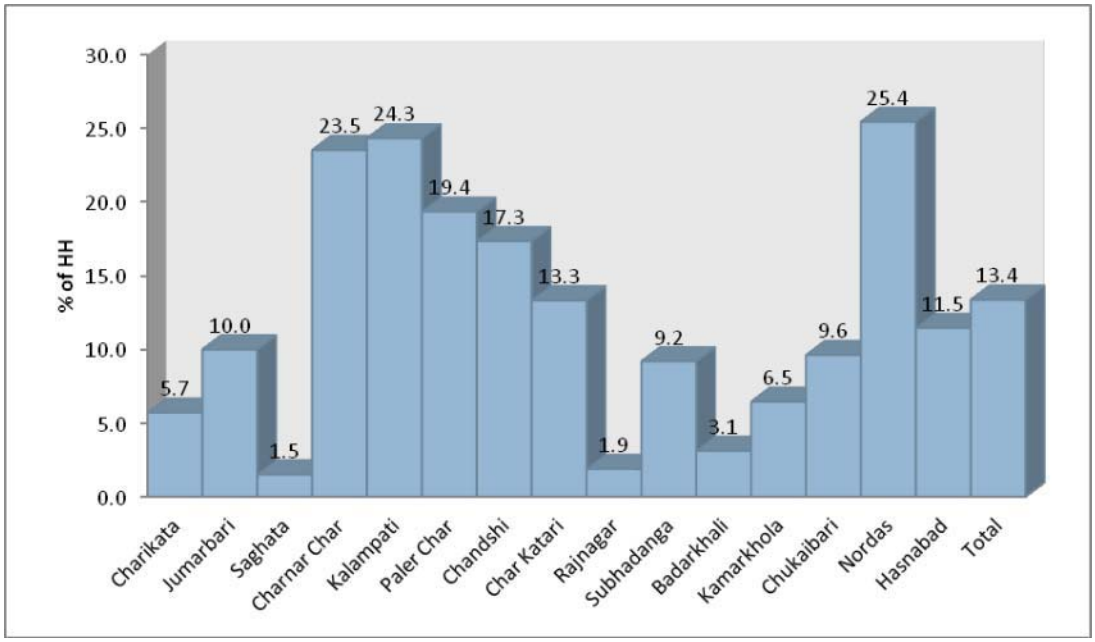

FIGURE 4.4: PERCENTAGE OF HHS RECEIVED LATRINE FROM UPS AND HAVE VGD CARD

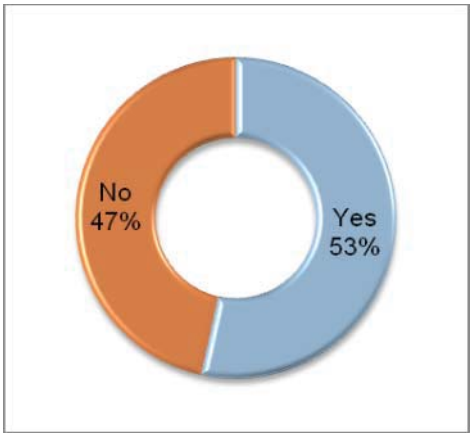

FIGURE 4.5: OPINION OF INTERVIEWERS WHETHER THE VGD CARD HOLDERS ARE HARDCORE POOR HHS

The 15 Unions under the study can be divided into seven area types namely teagarden and hill tracts, haor area, char area, coastal and offshore islands, barind tracts and plain land (Table 4.2). It should be noted that apart from three Unions all others may be categorized as hard to reach areas.

TABLE 4.2: AREA TYPE OF DIFFERENT UNIONS

Area type	Union
Teagarden	Charikata
Hill tracts	Kalampati
Haor	Charnar Char
Char	Jumarbari, Saghata, Paler Char, Char Katari, Chukaibari
Coastal	Badarkhali, Kamarkhola
Barind	Subhadanga, Nordas
Plain land	Chandshi, Rajnagar, Hasnabad

Area wise sanitation coverage is presented in Table 4.3. Hygienic latrine coverage is highest in barind tracts and plain areas (90.5% and 88.6% respectively) and lowest in the tea garden, haor and char areas (43.7%, 45.7% and 49.9% respectively). Among these areas the highest percentage of people in the hill tracts practice open defecation. Open defecation is also high in char, haor and tea gardens. Though sanitation coverage is highest in barind areas, open defecation is slightly higher (4.3%) compared to plain land, where open defecation is lowest (2.3%).

TABLE 4.3: TYPE OF AREA WISE SANITATION STATUS

Defecation practice of HH	Area type wise coverage (%)

		Area type wise coverage (%)						
		Tea garden	Hill tracts	Haor	Char	Coastal	Barind	Plain land
Pit latrine with slab and water seal or lid or flap		18.6	17.4	12.6	13.3	14.7	55.1	53.8
Pit latrine with slab but without water seal or lid or flap		12.7	23.9	28.3	24.9	38.5	20.4	29.2
Flush and pour flash latrine connected with pit or septic tank		12.5	8.9	4.8	11.7	4.5	15.0	5.5
Hygienic Latrine	(Observation)	43.7	50.2	45.7	49.9	57.7	90.5	88.6
	(Pplpercep.)	26	14	6	25	2	74	64
Open/ Hanging latrine	(Observation)	42.6	19.8	37.3	31.1	32.2	4.2	8.1
	(Pplpercep.)	25	3	57	51	3	3	7
Open defecation	(Observation)	13.4	25.9	16.0	16.7	7.4	4.3	2.3
	(Pplpercep.)	14	4	13	17	1	3	1
Other		0.2	4.1	1.0	2.3	2.7	1.1	1.1

Note: Observation means observations of the interviewer; Pplpercep. means median value of the opinion of people

Considering the median value of peoples' opinion, the perception of people in plain land and barind areas are good but very poor in coastal area, haor area and hill tracts. The comparative scenarios are further illustrated in Figure 4.6, Figure 4.7 and Figure 4.8.

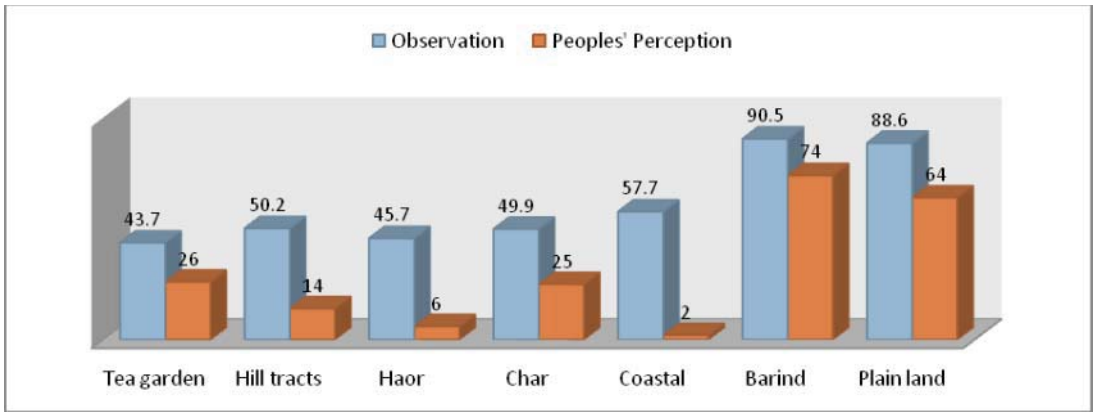

FIGURE 4.6: AREA TYPE WISE HYGIENIC LATRINE COVERAGE AS OBSERVED BY THE INTERVIEWER AND OPINED BY THE RESPONDENTS

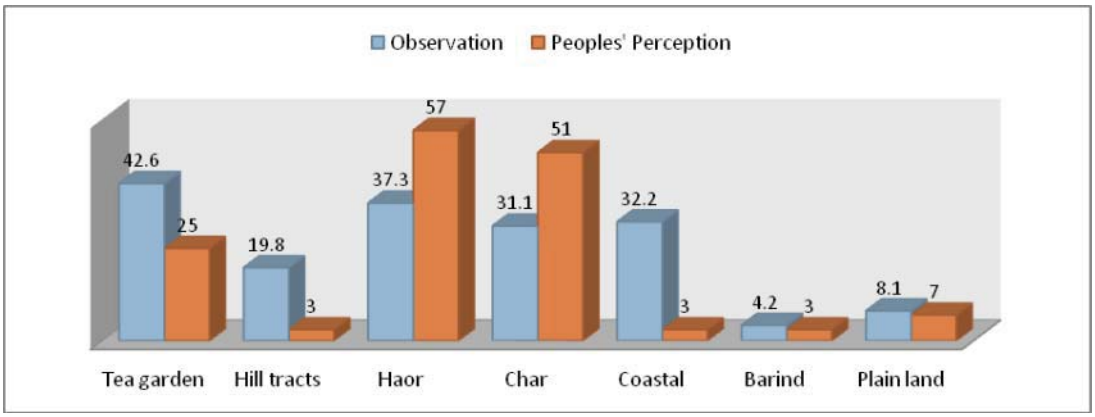

FIGURE 4.7: AREA TYPE WISE UNHYGIENIC LATRINE COVERAGE AS OBSERVED BY THE INTERVIEWER AND OPINED BY THE RESPONDENTS

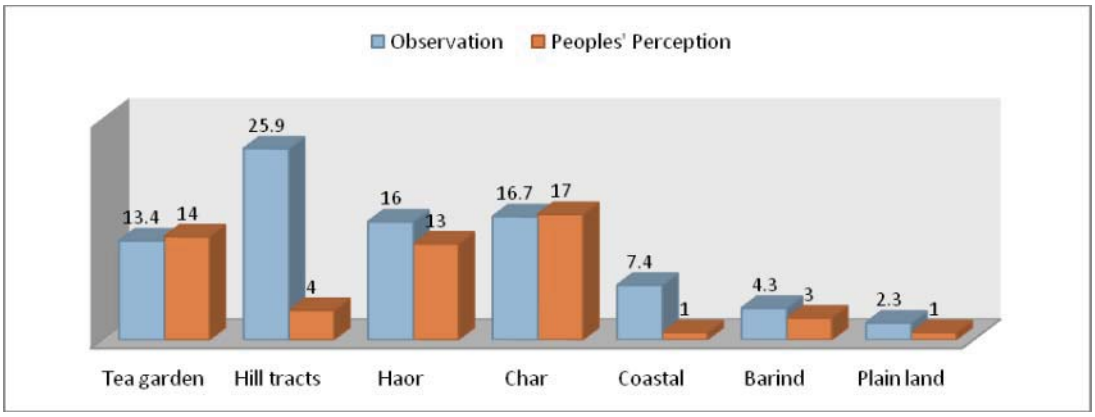

FIGURE 4.8: AREA TYPE WISE OPEN DEFECATION COVERAGE AS OBSERVED BY THE INTERVIEWER AND OPINED BY THE RESPONDENTS

REFERENCES

GoB (2011), ***Sector Development Plan (SDP),***Policy Support Unit,Local Government Division, Ministry of LGRD&C, Government of Bangladesh

BBS-UNICEF (2009), ***Multiple Indicators Clusters Survey Bangladesh 2009, Key findings,*** Bangladesh Bureau of Statistics-UNICEF, Dhaka

GoB (2005), ***National Sanitation Strategy,*** Ministry of LGRD&C, Government of Bangladesh, Dhaka

GoB (2005)***, Pro Poor Strategy for Water and Sanitation,*** Local Government Division, Ministry of LGRD&C, Bangladesh

GoB and UNICEF (2004), ***Report on the Nationwide Baseline Survey on Sanitation***, 2003, LGD, MoLGRD&C, DPHE, LGED, UNICEF, Dhaka.

UN-Water (2010), **The Global Analysis and Assessment of Sanitation and Drinking-Water** (GLAAS), UN-Water- World Health Organization(WHO)

WHO / UNICEF (2010), **Joint Monitoring Programme (JMP) for Water Supply and Sanitation**, World Health Organization – Unicef