Selling latrines to the poor: how effective it is?

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## **EXECUTIVE SUMMARY**

BRAC has been promoting personal hygiene practices and the use of safe water and sanitary latrines through its Rural Development Programme (RDP) since 1991. RDP sold a large number of latrines (45,000 as of June 1995) in it's operational areas (including Matlab) as part of a drive to improve rural sanitation through NGO forum. To study the impact of this on health as part of BRAC-ICDDR,B research framework in Matlab, it is important to understand how this programme is implemented. To provide feedback to the programme, this study aimed to explore the current status of the latrines sold by RDP in Matlab.

A total of 262 latrines (one latrine per household) were sold by RDP's Essential Health Care (EHC) at Matlab during July 1994 to October 1995. Data were collected during November-December 1995 from the persons to whom (mostly female) the latrines were sold, using a structured questionnaire. Of these 262 latrines, a little more than 60% were installed and around 12% of the installed latrines remained unused. The government subsidy (declared in July 1995) was a major factor motivating the villagers to buy latrines. Sixty nine percent of the recipients bought latrines after declaration of government subsidy, and only 10% after motivation by BRAC health workers. Some VO members mentioned that they bought slab latrines because they were assured of getting the government subsidy or housing loan by the BRAC staff. The reasons for not setting up latrines even after buying these from BRAC office were: want of additional money to build the structure of the latrine (49%); not getting the promised government subsidy (37%); and inundation by flood (12.5%).

From the findings of this study following recommendations are made: 1) RDP may encourage the villagers to use inexpensive local materials for constructing latrines; alternatively, loans may be given to the BRAC-eligible buyers to cover the cost of constructing the latrine structure and other ancillary expenditures; 2) close monitoring of installation by the local BRAC management is needed; and 3) more effort is required to follow up latrine recipients to identify obstacles in installation and use after they received slabs and rings and provide necessary help in overcoming those.

### INTRODUCTION

More than 15,000 people die each day from diseases related to water and sanitation all over the world despite the gains of Water Decade, 1980-1990 (1). It is estimated that 10% of health problems in the developing countries are related to diarrhoea and helminths both of which are mostly water borne. The prevalence of water borne diseases like diarrhoea can be reduced by provision of clean water for drinking, cooking and other activities and better sanitation facilities. These measures typically reduce diarrhoea incidence by at least 25% (2). However, the health benefits resulting from improved sanitation and water supplies will be limited if behaviour modification does not occur simultaneously. Though the use of water and hygiene practices are improving, Bangladesh has to go a long way for achieving a minimal level of sanitation. At present, sanitation is perhaps the most urgent environmental concern for reducing the prevalence of diarrhoea and other water borne diseases in Bangladesh.

BRAC through its Essential Health Care (EHC) component of Rural Development Programme (RDP) has been promoting the use of safe water, sanitation and hygiene practices since 1991. BRAC disseminates health education on safe water use and hygienic practices through different fora such as issue-based meetings of RDP and EHC, and household visits by village-based community health workers, the Shasthya Sebikas (SS). In addition to working closely with the Public Health Engineering Department of the government in achieving these objectives, BRAC also sells rings and slabs to the villagers, especially to the Village Organization (VO) members for constructing latrine. Small plants for producing rings and slabs are established by the VO members with loans provided by the RDP. The goal of the RDP-EHC programme is to ensure that at least 50% of the RDP VO members use slab latrines and other health inputs.

RDP sold a large number of latrines (45,000 as of June 1995) in different RDP areas including Matlab as part of a drive to improve rural sanitation through NGO forum (a forum of like minded NGOs to collaborate in the improvement of rural sanitation). To study the impact of this on health as part of BRAC-ICDDR, B research framework in Matlab (3), it is important to understand how it is implemented e.g., how many latrines were sold and actually installed, how many of these are actually used. This study aims to provide information on current status of the latrines sold by BRAC in Matlab.

#### Literature review

Very few studies have been done on the state of sanitation in RDP areas. A study by Chowdhury et al examined changes in health and hygiene behaviours as a result of RDP interventions (4). It was found that majority of the respondents defaecate in open places. The proportion of households (HHs) having slab latrine were 2.8%, 6.3% and 9.1% for control (new area; no credit disbursed), intervention (old area; no health intervention) and comparison (RDP absent) area respectively. It was in another BRAC study that a higher proportion of the non-VO member households (19%) had slab latrines compared to the VO member households (10%) (5). Although construction and use of pit and slab latrine for the entire population was low (10%), this showed an improvement of 2% since 1990 (6).

# **Objectives**

This study explores the current status of the latrines sold by RDP in Matlab. More specifically, the study aimed to (a) investigate what happens to the latrines sold by RDP with respect to installation and use, and the reasons behind; (b) assess the differences in household latrine installation and use according to BRAC eligibility status; and (c) explore the level of awareness about the benefits of the slab latrine and their maintenance

#### **METHODOLOGY**

# Background

BRAC's RDP started operating in Matlab in early 1992. Initially, a professional mason was given loan by RDP to start a ring and slab production centre and 82 units were sold by him till October 1995. Later, Matlab RDP in cooperation with the Department of Public Health Engineering (DPHE) of the government arranged training of 2-3 VO members on slab latrine production. A ring slab latrine production center was established in the Area Office (AO) with the assistance of DPHE in late 1993. The production of slab latrine is supervised by the Area Manager (AM) and the Programme Organizer (Health). The Matlab AO has loaned Tk. 10,000 as a revolving fund for producing rings and slabs from this centre by the VO members. These slabs and rings are sold at cost price plus a mark up of Taka 10 per latrine. The Shasthya Shebikas (SS) retain the Taka 10 as an incentive for motivating the latrine buyer. The RDP-EHC started selling latrines from this centre since July 1994 and 262 units were sold till October 1995.

# Sampling

According to the register maintained by the RDP-EHC at Matlab AO, 344 latrines (one latrine per household) were sold during early 1992 to October 1995. Of these, 76 were sold before by the mason referred previously and 6 after RDP-EHC started working in Matlab. The rest 262 latrines were sold by RDP-EHC and all of these households were included in this study.

# Data collection and analysis

Data were collected through a pre-tested structured questionnaire during November-December 1995. The respondents were the person to whom the latrines were sold by BRAC. Each interview, on average, took about half an hour. All the respondents except four were female.

## Limitation

This study gives the current status of latrines sold by BRAC in the Matlab RDP area only. Therefore, the results of this study may not be generalized for other areas of RDP.

# **RESULTS**

## Latrine

Table 1 shows the distribution of the 262 latrines which were bought from RDP AO during January 1994 to October 1995. Around 93% (243) of these latrines were sold to BRAC

eligible households. The proportion of latrine installment was nearly double in case of BRAC non-eligible households compared to the eligible households.

Table 2 shows the current use of the installed latrines. More BRAC non-eligible household members were currently using installed latrines compared to their BRAC eligible counterparts (93% vs 82%).

Table 1. Distribution of latrines sold by the Matlab RDP Area Office during 1992-1995 (n=262).

Latrines sold by RDP	Household state		us of latrine recipient BRAC non-eligible	
	No.	%	No.	%
Latrine installed	107	44.0	16	84.2
Latrine not installed	120	49.4		- '
Others (e.g., sold away, cost partly paid and therefore did not brought latrine home etc.)	16	6.6	3	15.8
Total	243	100	19	100

Table 2. Installment and use of latrines (n=123).

	Household status of latrine recipients				
Current status of latrine use	BRAC	BRAC eligible		BRAC non-eligible	
	No	%	No.	%	
Latrine currently in use	88	82.2	15	93.0	
Latrine currently not in use	19	17.8	1	7.0	
Total	107	100	16	100	

When asked where they got the money for buying latrines, it was found that a little more than 30% bought latrine with their own money, 17% with BRAC loan and 53% took advantage of a government subsidy (they have to pay the balance) in addition to own money. The government declared a subsidy of Taka 200 (minimum price for one slab and three rings without subsidy is Taka 385/-) for each latrine in July 1995. Indeed, the government subsidy was a major factor motivating the villagers in buying the latrines. The majority (69%) of latrines were sold after the declaration of government subsidy. Some of the VO members mentioned that they bought slab latrine because they were assured by BRAC staff of getting a government subsidy or housing loan from BRAC. Among those who bought slab latrines, 74% were promised to a Government subsidy and 19% housing loan from RDP. Only 7% of the respondents bought latrines after motivation by BRAC's community health workers, the SSs.

Attempts were made to identify reasons for not installing latrines bought from Matlab AO by the VO member HHs (n=120). These are listed in Table 3. Around 49% of the VO members did not install latrine for want of additional money to build the structure of the latrine while 37% for not getting the promised government subsidy. A little more than 14% of the VO member did not install latrine because their houses were inundated by flood water.

The majority of the eligible recipients (74%) stated that as the latrines were installed only a few days ago, the household members had not yet started to use it (Table 4). The household members of BRAC non-eligible recipients did not use it because the latrine was primarily built for guest.

Table 3. Reasons for not installing latrines by the BRAC eligible recipients (n=120).

Reason for not installing latrine	No.	%
Not receiving government subsidy	44	36.7
Lack of money for construction of latrine structure	59	49.2
Flood	17	14.1
Total	120	100

Table 4. Reasons for not using latrines after installation (n=20).

Reasons for not using installed latrine	Household status of latrine recipien				
			BRAC non-eligible		
	No.	%	No.	%	
Latrine built for guests only	3	15.8	1	100	
Latrine installed only a few days ago	14	73.7			
Latrine structure not yet built	2	10.5			
Total	19	100	1	100	

# Hygiene practices

The recipients of slab latrines were asked about sanitation related health practices of the members in their respective households. The following facts emerged:

Use of latrine. Around 40.5% of the males and 40.5% of the females used slab latrine. Among the male and female children and adolescents (6-18 years), the percentage of slab latrine users were 30 and 27 respectively. Only 4% of the younger children used slab latrines. Regarding disposal of child's faeces, only 47% households reported to dispose it in a safe place. The solid waste was disposed to a fixed place only in 47% of the households. Among the slab latrine non-user children, 47% used kucha latrine for defaecation and in 14% of the cases the solid waste was disposed at a fixed place.

Maintenance of latrine. Latrines were cleaned in 32% of the households with water only, 1.5% with branded toilet cleaier Harpic, 0.4% with phenyl, 3.1% with bleaching powder and 0.4% with labon-soda-choon (salt-soda-lime). Around 80% of the respondents said that their latrines did neither smell nor spread germs. Seventy-four percent of the respondents said that they had received awareness training and motivation from health workers of BRAC and ICDDR,B while 7% received this from relatives, or through radio, television, etc.

Hand washing practice. Concerning adult hand washing practices after defaecation, it was found that 35% of these households washed their hands with soap, 16% with ash, 29% with soil and 11% with water only.

#### DISCUSSION

Of the 262 latrines sold, a little more than 60% were actually installed. Furthermore, a substantial proportion of the installed latrines remained unused. In most of such cases, however, installation was done too recently to be used. Installation and use were more for recipients hailing form BRAC non-eligible households. Many recipients complained about the quality of the slabs and rings; they complained that these cracked very easily because the cement, sand and gavels were not mixed in right proportion.

A major factor which motivated the recipients to buy latrine was the declaration of subsidy by the government. BRAC also tried to use this subsidy as a mean of motivating VO members to purchase latrines. When the government failed to provide the subsidy in time, BRAC workers experienced many problems. Many of the buyers did not install these latrines because they lacked funds for building the fence structure of the latrine. Awareness about the benefits and maintenance of sanitary latrines and handwashing practices were found to be reasonably good.

However, it is likely that many of the problems identified in this study may be seen in other RDP areas as well.

### RECOMMENDATIONS

From the findings of this study following recommendations can be made.

- 1. RDP-EHC should either encourage the villagers to use in-expensive local materials for constructing latrines or may provide loans to VO members and other deserving poor households for installation of latrines.
- 2. The quality of the slabs and rings is said to be questionable. Breakage is common. Close supervision of the production unit by the concerned PO (Health) and PAs is necessary for quality control of slabs and rings.

3. Current method of monitoring latrine recipients after they have received slabs and rings, need to be strengthened. More efforts should be given by the EHC programme to follow up latrine recipients so that obstacles in installation and use can be identified at an early stage and appropriate remedial measures can be taken.

#### REFERENCES

- 1. The World Bank Annual Report 1993. Washington DC: The World Bank, 1993.
- 2. Ali A, Mahmud S, Islam N, Karim F. Water use, sanitation practice and personal hygiene behaviour in WHDP area. Dhaka: BRAC, 1995.
- 3. Chowdhury MRK (editor). Proceedings of a workshop on research framework. Socio-Economic Development and Health: A Joint BRAC-ICDDR, B Research Project. Dhaka: BRAC, 1994.
- 4. Chowdhury AMR, Ali A. Health impact of non health intervention. Dhaka: BRAC. 1992.
- 5. Ali A, Mahmud S, Karim F, Islam N. Utilization of different health services in RDP-PHC area. Dhaka: BRAC, 1993.
- 6. Karim F, Chowdhury AMR, Mahmud S, Islam N, Ali A. The primary health care component under the rural development programme of BRAC: a review. Dhaka: BRAC, 1993.