Chapter 5

THEMATIC PRESENTATIONS AND DISCUSSIONS

Thematic Group 1 : Motivation and Collective Action

5.1 UNICEF Experience on Sanitation in Bangladesh: The Challenge Ahead

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5.1.1 Background

In Bangladesh, it is estimated that only 43% urban and 10% rural households use a water seal latrine. If simple pit latrines are included, the coverage figure rises to 61% urban and 41% rural. This equates to a national average of approximately 43%. However, there are some under-served areas, which give rise to particular concern. For example, it is estimated that only 14% of slum households in the metropolitan cities have sanitary latrines (water seal 6.6% and pit latrine 6.9%, Progotir Pathey 2000). Therefore, the vast majority of the people living in urban slums and a little over half of the people living in other areas continue to use unsanitary latrines or practice open defecation. There is also widespread use of hanging latrines, which pose a particular threat to both health and the environment. Personal hygiene is also a concern, when it is estimated that only 7% of people wash hands with soap and water after defecation.

5.1.2 Past UNICEF Support

There have been a number of positive experiences in the recent past, which provide useful lessons and which can be built upon. The strongest ones of these are:

- DPHE-UNICEF Village Sanitation Projects from 1979 to 1995 when number of DPHE production centres rose from 10/15 to 1000 including the introduction of sale of latrine components together with recycling the sale proceeds at local level. During the time the private centres grew from almost zero to about 3000 triggered by the introduction of sale in DPHE-UNICEF programs. As a result, an accelerated coverage was achieved through the integration of sanitation with water supply etc. The projects were jointly sponsored by the Ministry of LGRD, Ministry of Health and Family Planning, WHO and UNICEF.

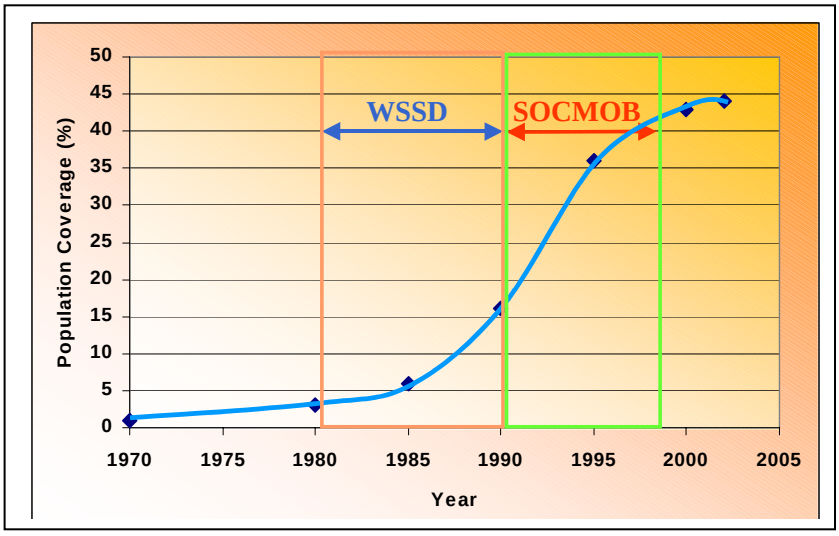
- The nationwide DPHE-UNICEF social mobilisation for sanitation was implemented by the public sector during 1993-1996. This programme was supported by UNICEF with funding from DANIDA and SDC. Local government involvement was attempted under this programme by

introducing union WATSAN committees. Under the project, several initiatives were taken to improve the sanitation situation of the country in partnership with local Government Institutions, NGOs and with support from the local Civil Administration. For instance the 21 Upazila sanitation programme in partnership with NGO-Forum is worth mentioning. Under the programme 100% sanitation was achieved in Kushura Union in Dhamrai through a local NGO.

- Other examples where local government has taken the initiative include Dashjira, where success was achieved by influencing the community through school brigades and in the local government initiatives in Agailjhara, Banaripara, Dhamrai and Barisal in the late 80s and early 90s. 100% sanitation coverage was achieved in Mirzagonj Upazila of Patuakhali district by DPHE and Upazila Administration with support from UNICEF in 1993.

Figure 5.1 shows that from the 1980's there have been ongoing attempts to improve the national sanitation coverage, but progress is falling far short of needs and has noticeably been falling off since 1995, when nation wide social mobilization programmes were halted due to a lack of funds and a shift in donor priority. The estimates indicate an estimated increase from 1% to 21% between 1971 and 1990 and from 21% to 48% between 1990 to 1995 nationally (Progotir Pathey 1996). There has then followed a period of negative growth when the estimated coverage level as of 2000 is only 43% (Progotir Pathey 2000). At the current rate of progress there can be no significant progress towards meeting the World Summit for Sustainable Development (WSSD) target and Millennium Development Goals.

It is also quiet evident from the graph that there is a sharp rise of sanitation coverage due to the Social Mobilization programme where, the Government, development partners, NGOs and civil societies were mobilized and worked together to improve the sanitation situation in Bangladesh. After 1996, due to the emerging arsenic problem, government shifted the priority from sanitation to arsenic mitigation and donors also discontinued their support as a result the momentum gained due to the Social Mobilization programme has declined significantly over the last seven years.



Source: M. Feroze Ahmed, (2002) "Water Supply and Sanitation : Achievements of the International Targets and Sustainability of Services", Proc. Of the 28 WEDC Conference, Kolkata, India.

Figure 5.1: Sanitation Trend in Bangladesh

5.1.3 Bangladesh Goal

In recent times, the poor sanitation coverage and the slow rate of improvement have become a concern. The Bangladesh Chapter of the Water Supply and Sanitation Collaborative Council (WSSCC-B) has identified sanitation as a focus area. In this respect, a nation wide sanitation campaign ahs been launched by the Government of Bangladesh.

To have a greater impact, a month long National Sanitation Campaign has been launched in October 2003. It is suggested that the practice of observing a national sanitation campaign should be restarted and the period should be extended from one week to one month based on the past experience and lessons learned.

To fulfill the World Summit for Sustainable Development (WSSD) target of " Halving the figure of 2.4 billion people who are not have access to basic sanitation facilities". Bangladesh needs to achieve a situation of total sanitation by the target year of 2015, then the pace of sanitation coverage should be 2% per annum. If the rate is 8% per annum then we can achieve the Bangladesh target, which is: "Every Household in Bangladesh Will Have a Sanitary Latrine by 2010"

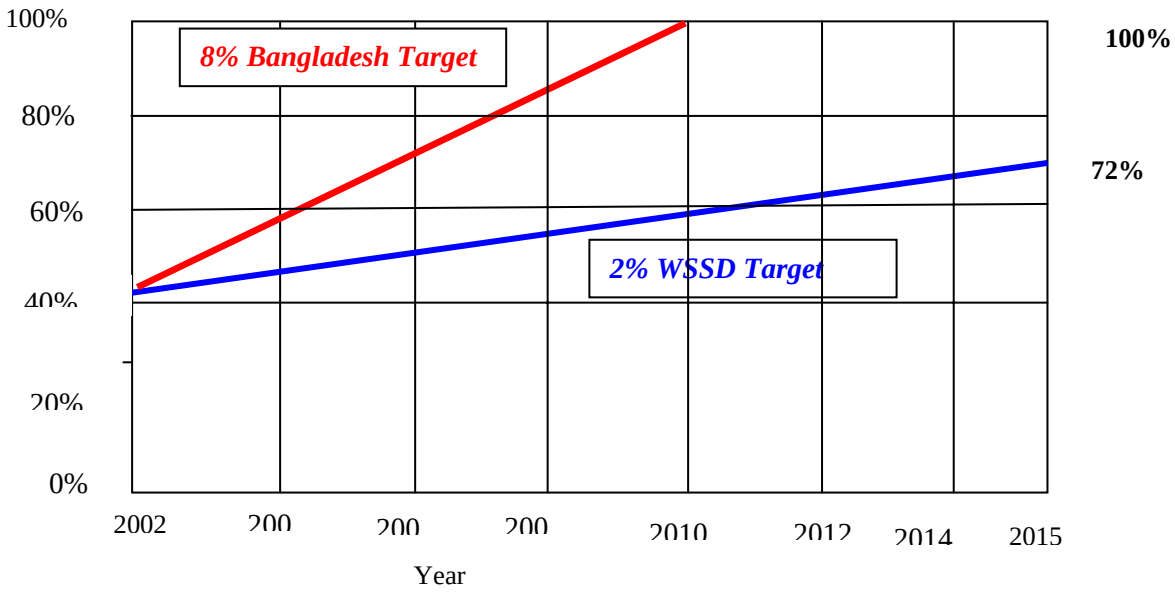


Figure 5.2 : Bangladesh Target and WSSD Goal

5.1.4 The Challenge Ahead

5.1.4.1 The physical and financial requirement:

It is important to realize the quantum and cost of work that would be needed in order to reach the goal of total sanitation by 2010. According to the Bangladesh Bureau of Statistics (Statistical Pocket Book 2000) there are 25,362,321 households in Bangladesh. The Progotir Pathey 2000 publication estimates that 43% have a sanitary latrine, which means that 57% do not. Considering the population growth and projected household for the next 9 years, it is found that 288 or about 290 latrines per union per year or 24 per union per month will be required to cover 100% sanitation

by the year 2010. Physically this would seem to be achievable, although the cost is another factor that has to be understood in this quest.

Table 5.1: Yearly Latrine Requirements per Union to Achieve 100% Sanitation by 2010 in Bangladesh

Year	AV. Growth Rate (%)	Formula = (1+r)	Projected Population (million)	House hold (HH) size	Projected Households	HH without latrine (57% HH without latrine)	HH Considering 8% growth of Latrine Construction	Latrine Require-ment/union (4484 Unions)	Avg. Latrine per Union
2002	1.37	1.0137	130.94	5.09	25,724,951	14,663,222	1,173,058	262	288
2003	1.37	1.0137	132.73	4.99	26,599,198	15,161,543	1,212,923	271	
2004	1.36	1.0136	134.54	4.95	27,179,798	15,492,485	1,239,399	276	
2005	1.35	1.0135	136.36	4.91	27,771,894	15,829,980	1,266,398	282	
2006	1.34	1.0134	138.18	4.86	28,432,099	16,206,296	1,296,504	289	
2007	1.33	1.0133	140.02	4.84	28,929,752	16,489,959	1,319,197	294	
2008	1.32	1.0132	141.87	4.82	29,433,610	16,777,158	1,342,173	299	
2009	1.32	1.0132	143.74	4.79	30,008,351	17,104,760	1,368,381	305	
2010	1.31	1.0131	145.62	4.79	30,400,835	17,328,476	1,386,278	309	
Total Households							11,604,310		

Source: BBS, 2002 ; Base Population (2000): 127.40 million

At today's rate, a water seal latrine costs approximately Taka 500.00 (without superstructure). The simpler pit latrine is estimated at Taka 275.00. To construct the total requirement of 11,604,310 latrines, this presents a financial requirement of between approximately Taka 580 crore ($ 9.67 million) for water seal latrines and Taka 319 crore ($ 5.3 million) for simple pit latrines. These figures are daunting, but if the effort is distributed by union, it can be seen that the cost is more manageable at an annual range of Taka 145,000.00 ($ 2,417) and Taka 79,750.00 ($1329) for water seal and pit latrines respectively. These figures represent the overall dimensions that would be involved in reaching a state of "Total sanitation" in Bangladesh.

5.1.4.2 Paradigm shift from service delivery to demand creation

Given the challenges that would have to be met in order to achieve total sanitation, it is expected that the exiting trend and government policy needs to be altered in order to expedite the process. Also sectoral agencies should change their conventional service providers' role to the facilitators' role so that the private sector can contribute for the sanitation target in Bangladesh. All stakeholders should work together to achieve the goal. These stakeholders include Government at national and local level, development agencies, NGOs and the households themselves. To galvanize support, there would need to be a series of consensus building actions, strategy development and implementation plans agreed.

5.1.4.3 Latrine production capacity

An inventory of the latrine productions centres operating in the seven Districts of the DPHE-UNICEF Rural project districts has been carried out by the Project Mangement Unit (PMU). Existing production centres were classified into three groups: DPHE, NGOs and Private Producers. The locations of these latrine producers was also collected on the basis of updated information gathered in 2001 from DPHE, NGO Forum, PROSHIKA, BRAC and CARITAS. It was found that as of June 2001 there were 490 latrine production centres; 19% belonging to DPHE, 43% to NGOs and 38% operated by private entrepreneurs[1]. It is important to note that there are fewer private producers in Jamalpur, Chuadanga and Madaripur Districts with only 19% of the total number of private producers. This tables also reveals that for these seven districts, it will take an average 23 years to achieve 100% sanitation coverage.

Therefore, there is an urgent need to support the private producers to fulfill the gaps and create a supportive environment to them to establish the latrine production centers establish latrine in the un-served areas.

Table 5.2: Latrine Production Centres Serving Developmental Phase Districts

Districts (First year, develop-mental phase)	No of Upa-zilas	No of Unions	Estimated number of House-holds 2001[2]	Estimated Households without sanitation (63%)	No of Latrine production centres As of 2001				Current yearly Capacity of Latrines production	Time needed To reach 100% sanitation in years
					DPHE	NGO	Private Producer	Total		
Gaibandha	7	82	389,040	245,095	16	32	42	90	21,600	19
Rangpur	8	83	386,409	243,438	18	33	31	82	19,680	22
Jamalpur	7	67	356,924	224,862	13	36	16	65	15,600	31
Sirajgonj	9	79	431,319	271,731	18	38	22	78	18,720	32
B. Baria	7	97	403,860	254,432	13	25	55	93	22,320	19
Chuandanga	4	31	128,311	80,836	7	21	12	40	9,600	12
Madaripur	4	58	211,325	133,135	10	24	8	42	10,080	25
TOTAL	46	497	2,307,188	1,453,529	95	209	186	490		

Assumptions: 1) Yearly capacity of Latrine Production Centres calculated on the basis of 20 sets (5 rings one slab) per month. 2) Yearly capacity of latrine production remains the same
Source: Inception Report, Environmental Sanitation hygiene and Water Supply in Rural Areas Project

The limited number of latrine production centres also results in a reduced production capacity. For example, the estimated maximum annual production of Gaibandha District is 21,600 latrines. Figure 5.3 shows that it would take some 19 years to reach 100% sanitation coverage at the present production rate. An alternative approach is needed to accelerate and sustain the sanitation coverage. This can be achieved through an increase in the demand that will boost production. Another way is to promote a wider range of latrines according to their preference and ability to pay. Past experiences have demonstrated that the rate of increase of sanitary latrine installation slows down significantly when it reaches the level of 60% (DPHE-ICDDRB, 1997). A relatively high initial investment is required for the installation of a sanitary latrine, which make it unattainable to the poorest members of the population.

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[1] It is believed that the number of private producer presents a greater fluctuation over time than the centres belonging to DPHE or NGOs. Therefore, the numbers expressed have a relative error of plus or minus 15%

[2] The 2001rural population has been calculated on the basis of the last 1991 Bangladesh Population Census using the natural annual growth rates given in the statistical pocket book (1997 &1999) for the period 1992-1998. A growth rate of 1.77% has been used for the period 1998 to 2001. The estimated rural population will be revised as soon as the data from the last population census 2001 is published and made available.

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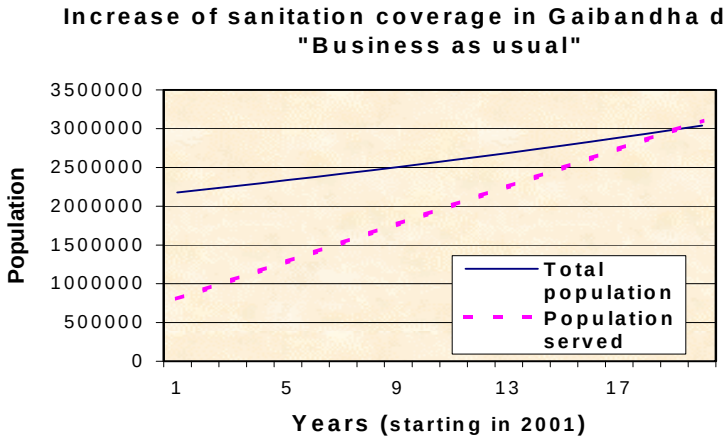


Figure 5.3: Increased Sanitation Coverage in Gaibandha District

5.1.4.4 Reaching the poor

To reach the poor community is a major challenge for any sanitation programme in Bangladesh. For the rural landless and poor people making arrangement of their own latrine is far from a reality. According to the BBS "Preliminary Report of Household Income and Expenditure Survey 2000", the average income for urban and rural households is Taka 9,878.00 and Taka 4,816.00 respectively. What portion of this would be disposable will vary, and so the time frame needed for a household to save enough money for latrine construction has to be taken into consideration when setting targets. It also needs to be considered that these incomes are average, and the income of many households may be smaller than that quoted. There would need to be special provision made to assist the poorer groups (25-30 million hard core poor, Ref. WSSCC-B Position Paper).

At the national level absolute poverty (2122k. cal/per/day) has had a declining tendency since 1988-89. Incidence of extreme poverty (1805 k.cal/per/day) has also decreased to 25.06% in 1995-96 from 28.36% in 1988-89. Whereas in urban area the opposite picture is noticed in respect of absolute and hardcore poverty situation. In urban areas hard-core poverty increased to 27.27% in 1995-96 from 26.38% in 1988-89.

The urban slum areas may need different designs taking into consideration the paucity of available space. The lack of ownership right over land is a grate problem for these poor people and therefore they are not interested to invest in latrines. The urban poor also spend a greater percentage of their income to get urban infrastructure services than the upper income group living in the formal or planned areas. It is also found that urban people spend approximately 30% of their household income on non-food items whereas the rural people spend only 15% of their income on non-food items. Also the death rate of urban poor is much higher than the average death rate of the urban and even the rural population. Considering the poor income group of Tk. 2000-Tk. 3000 income bracket it is found that a major share of their income is spent on foods (64%) and only 10% of their income is left for water, sanitation and other purposes.

5.1.4.5 Sanitation as a priority

Some people may be able to pay but are not yet willing to spend money on a latrine. A recent study done by two interns with UNICEF on Social Acceptability of Latrine found that a latrine is not at their top priority list. For the people sanitation is a 3rd or 4th priority.

One of the major obstacles to getting someone to allocate resources for a latrine is the difficulty of quantifying the benefits gained from such a system. In comparison, the benefits of a water point are clearly evident in everyday life. This obstacle can be overcome by first building awareness of the more obvious benefits including privacy, convenience, and status.

5.1.4.6 Involving local government institutions

In Bangladesh, the Department of Public Health Engineering (DPHE) is the major sectoral agency responsible for the water and sanitation both in the rural and urban areas. The presence of field level staff is restricted only up to the Upazila level in case of rural and almost non-existent in the urban areas. But for sanitation promotion, which needs considerable interpersonal communication with the individual family, the presence of village/ward level institutions became more and more unavoidable.

On the other hand, the field presence of the local Government (both in rural and urban) is upto the Ward level. Under the current administrative arrangement in Bangladesh, the elected body closest to the villages is the Union Parishad (Council). The Union Parishad Act of 1993 established WATSAN Committees at the UP level. These may not be functioning effectively but they are potential resources with a formal mandate to take up hygiene and sanitation closer to their constituencies than the current centralized systems. Under the proposed Local Government Reform Bill, there will be a Gram Parishad/Sarkar (Village Council), Union Parishad, Upazila Parishad and Zilla (District) Parishad. There is a possibility that the villagers will be able to participate directly in the formulation and implementation of development projects at the village level.

5.1.4.7 Behaviour change

The long lasting behavior change for sanitation is also the major challenge for any sanitation improvement programme. It is very difficult to change the behavior overnight. For sanitation and hygiene practice it is important to have continuous follow-up and awareness generation. From a recent study done by two interns with UNICEF on Social Acceptability of Latrines, it is found that the people only consider ring-slab latrine as a “Latrine” and they don’t consider the home made pit latrine or ‘Kuncha “ latrine as a “Latrine”. It is very important to generate awareness about the hygienic latrine and the incremental development of the sanitation practice. It is also an important lesson that the provision of a latrine alone may not lead to a positive impact in terms of health and welfare.

5.1.5 Present UNICEF Support on Sanitation

The GoB and UNICEF have come forward to implement a 5-year Project of Environmental Sanitation, Hygiene and Water Supply in Rural Areas, with financial assistance from DFID.

The project purpose is: “To improve standard of hygiene practices and behaviour, particularly for the poor, on a sustainable basis”.

In order to achieve this, the project has developed five components:

- Social Mobilisation for Awareness Building
- School Sanitation and Hygiene Education

- Chittagong Hill Tracts
- Safe Water Supply
- Institutional Capacity Building

The rural project is being implemented in seven plain land districts in 28 Upazilas and three Chittagong Hill Tracts Districts in nine Upazilas. All the components are also being implemented in Chittagong Hill Tracts with special focus on ethnicity and needs. However for the sanitation promotion the first two components will be discussed next.

5.1.5.1 Social Mobilisation for Awareness Building

A demand responsive approach has been applied to project implementation incorporating an initial process of stimulating demand. The social mobilisation campaign, as part of the demand creation process, will lead the project into interpersonal and inter-group activities, which will be the other main method of influencing behaviour change in the long term A participatory needs assessment technique, referred to as "Participatory Rural Appraisal" (PRA), is being carried out to involve actively the people in the analysis of the water and sanitation problems that affect them and in the identification and design of potential solutions. PRA is one of the principal tools to operationalise the Demand Responsive Approach.

Strategies

Demand Creation through SOCMOB-AB
This demand-responsive project creates demand through the Social Mobilisation for Awareness Building (SOCMOB-AB) campaign. This was developed over a two-year period, successfully tested, and used as the primary tool for demand creation at the start of the project. This was based on the DPHE-UNICEF Social Mobilisation programme (SOCMOB), which was implemented during the period 1992 to 1999.

This multi-pronged campaign was developed on the basis of experiences and lessons learned from KAP studies, field visits, expert opinions and other relevant programme like “Control of Diarrhoeal Diseases” (CDD). The communication campaign emphasizes the fact that hygienic practices, like other social behaviours, cannot be achieved by individual change in behaviour but requires concerted action from the entire community. Specific behavioural development and change are expected in the following areas:

Regular use and maintenance of sanitary latrines:
- Regular use of sanitary latrines
- Safe disposal of children’s faeces
- Proper maintenance of sanitary latrines

Good Hygiene practice:
- Proper hand washing before eating
- Proper handwashing after cleaning baby’s bottom
- Proper handwashing after defecation

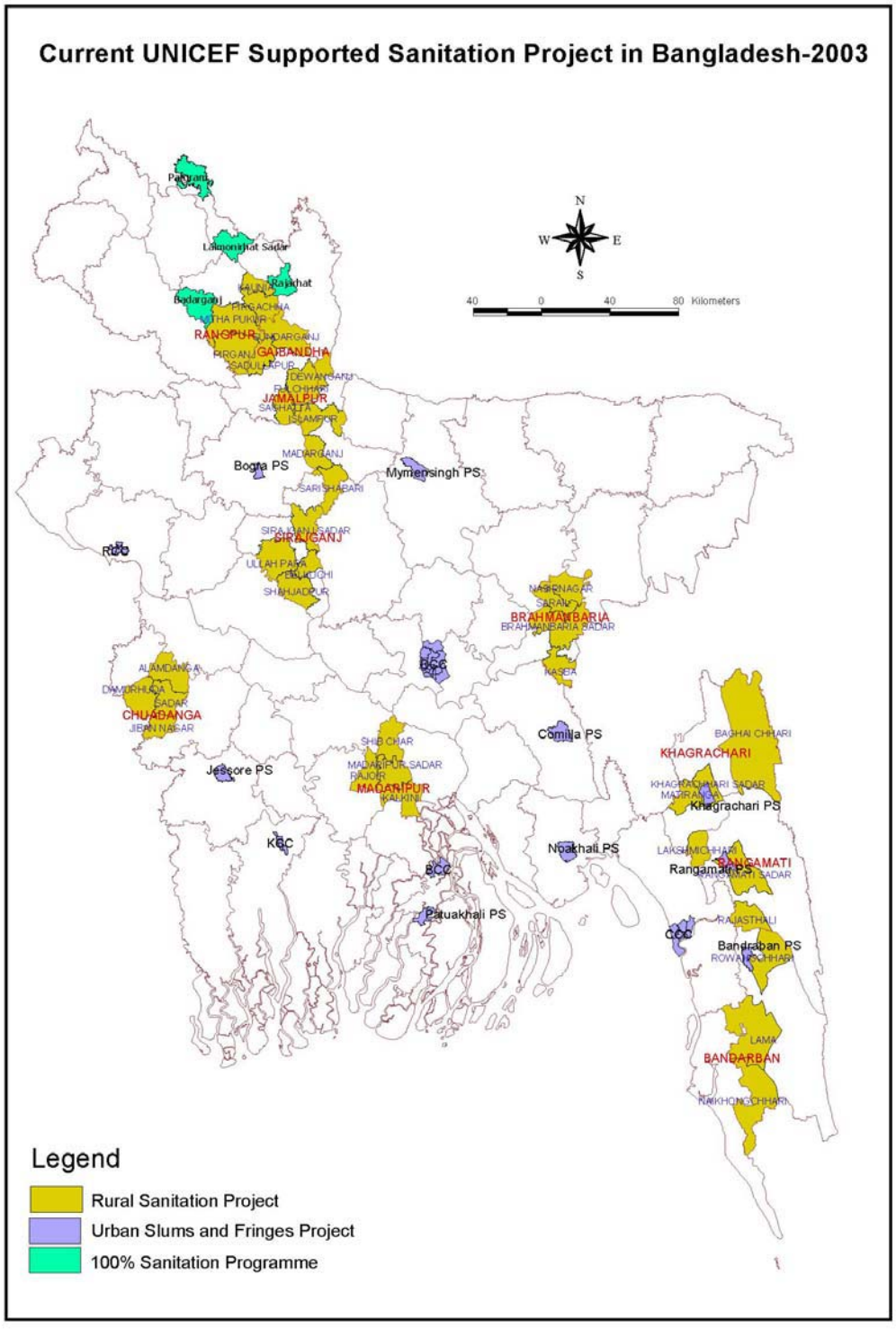


Figure 5.4 : Current UNICEF Supported Sanitation Projects in Bangladesh - 2003

Safe water use:

- Drawing of safe water from arsenic free tube well
- Safe storage and management of water
- Washing of raw fruits and vegetable using tube well water

The multi-pronged, multi-partner SOCMOB-AB campaign involves the use of different media opportunities ranging from mass to local and inter-personal communication. This campaign is intended to promote demand creation and provide people with the information they need to make informed choices about improved hygiene practices and WatSan facilities. It has been delivering clear messages in a manner that will ensure action from the target population. The multi-channel, mutually reinforcing approach is appropriate to the audience and prevailing conditions and is illustrated in Figure 5.5.

SOCMOB-AB material has been developed into four communication packages:

1) Mass-Media
2) Interpersonal communication
3) Child-to-Child and Child-to-Community
4) Mobilisation of Influential Persons

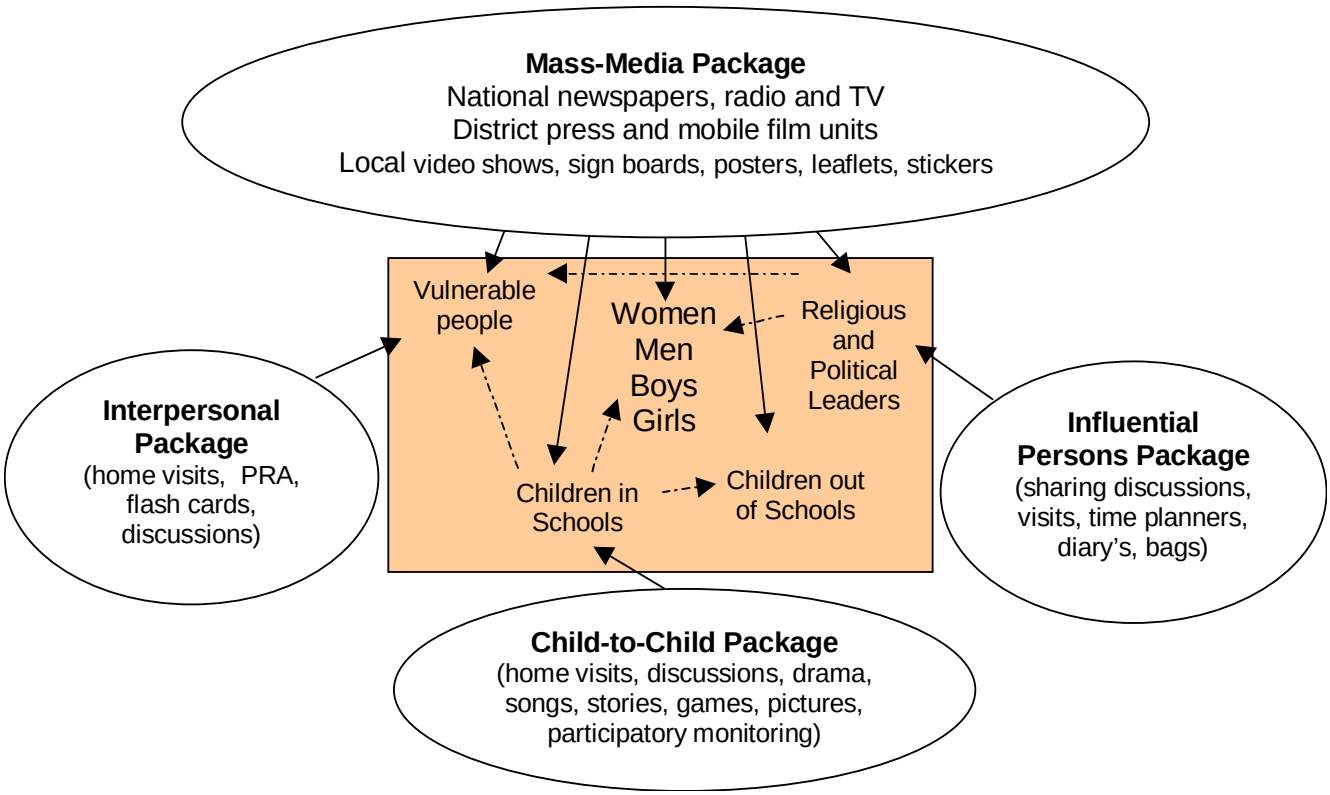


Figure 5.5: Message Delivery Process in SOCMOB-AB

Responding to demand

Based on assessment of available resources and on information related to hygienic behaviour, choices of technologies, level of service, cost and maintenance issues, the community decides upon which specific actions and technological options to pursue as a group and as individual households and express their choice in the Community Plan of Action.

The project responds with a combination of the following types of support;
- Support for government 'Grameen Sanitation Centres' for sanitation
- Support for private latrine producers for sanitation

Incremental Development of Behaviour

Based on the experiences studied during the inception period, an approach based on the incremental improvement of sanitation, avoiding the stipulation of high cost standard designs, is being promoted. The progress of behaviour change will follow incremental development, achieved step by step, instead of trying to reach the perfect behaviour and level of service from the outset. A range of low cost hygienic options instead of only the ring-slab water-seal latrine is being promoted by the Field Agencies.

Research and Development

Research and Development activities are being carried out to identify more user-friendly sanitation options and technologies that are suitable for flood prone and high water table areas.

Major Interventions

Grameen Sanitation Centres:
The various activities of SOCMOB-AB, and the Community Plan of Action in particular, will increase the demand for sanitary latrines. The DPHE "Grameen Sanitation Centres" are a primary source to address the demand initially. Currently there are 900 Centres in Bangladesh and 64 of them are in the seven Districts selected for the developmental phase of the project.

The activities of the Grameen Sanitation Centres are summarized as follows:

- Produce latrine components: water sealed slab and concrete ring,
- Organize training for private latrine producers and encourage their installation,
- Provide health education through communication material,
- Set-up temporary mobile latrine production centres on the basis of local demand.

If a mobile centre is required and the need is expressed in a Community Plan of Action, the Union WatSan Committee, after having checked the validity of the request, will solicit the nearest "Grameen Sanitation Centre" to establish a mobile centre in the concerned community. Within the limit of the ADP allocation of the "Grameen Sanitation Centre"[3], the Union WatSan Committee will make an advance for fifty latrine sets according to the existing Government rules and will arrange the necessary plot of land that will be used temporarily by the mobile centre. The "Grameen Sanitation Centre" will send their masons and equipment and will produce the latrine components as required.

[3] Approximately 400 latrines per year. Ref: Project Proforma for Grameen Sanitation project, DPHE 1997.

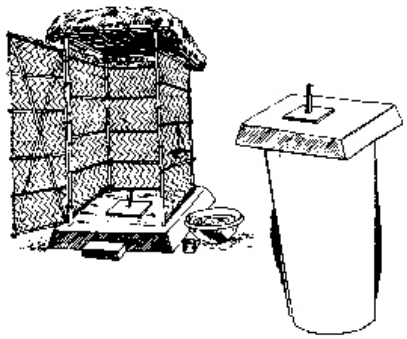
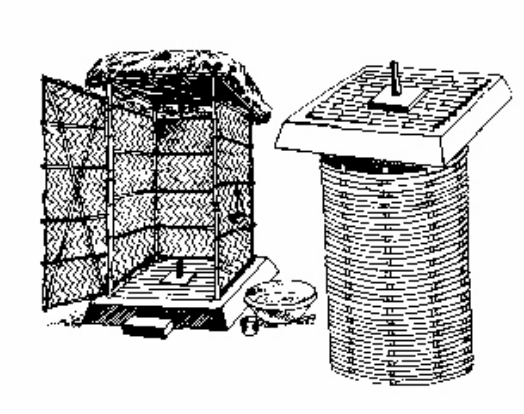
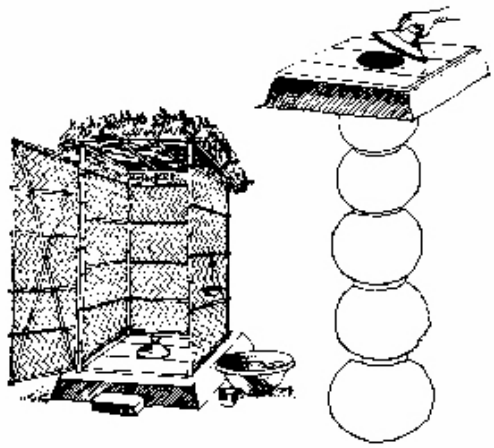
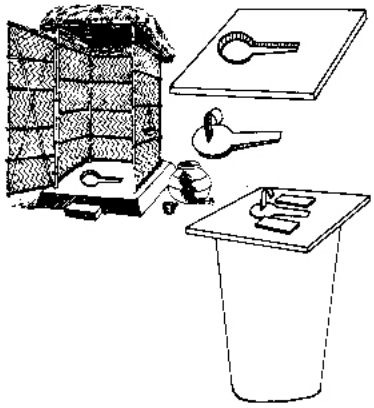
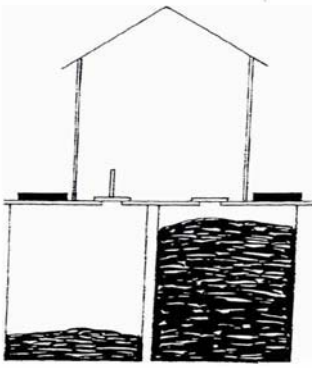
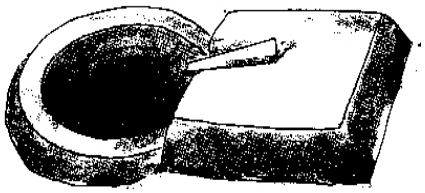
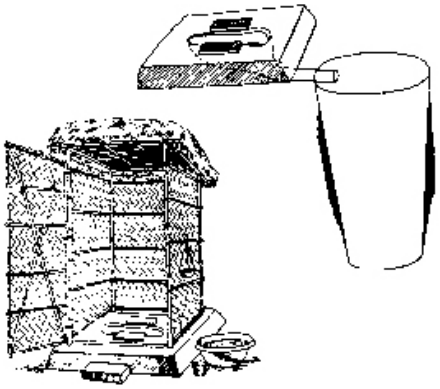
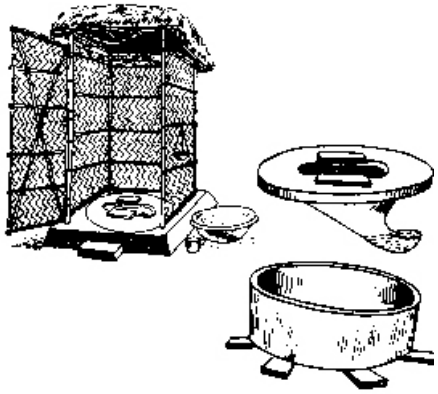
Home made latrine without lining 	Home made latrine with bamboo lining and slab 
Home made latrine with clay pot lining 	Home made latrine with clay ring lining 
Latrine with San Plat without lining 	Alternating latrine with clay ring or concrete lining 
Off-set latrine with chute (without lining)	Off-set latrine with pan (without lining)

Figure 5.6a: Latrine Types Promoted under the Project

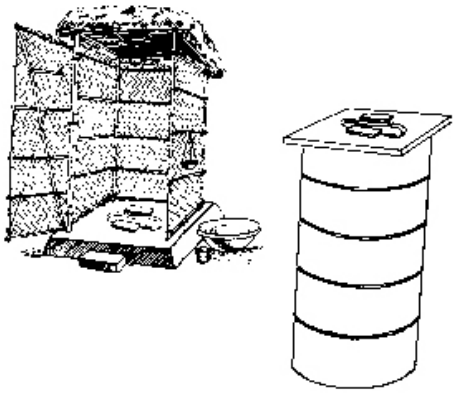




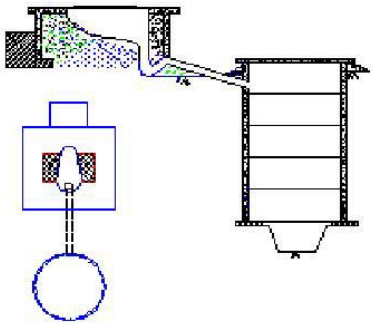
Single direct pour-flush latrine
(1 slab with concrete/plastic pan and 1ring)



Single direct pour-flush latrine (1 slab with concrete/plastic pan and 5 rings)



Off-set single pit latrine with
pour-flush (with lining)



Off-set double pit latrine
with pour-flush (with lining)

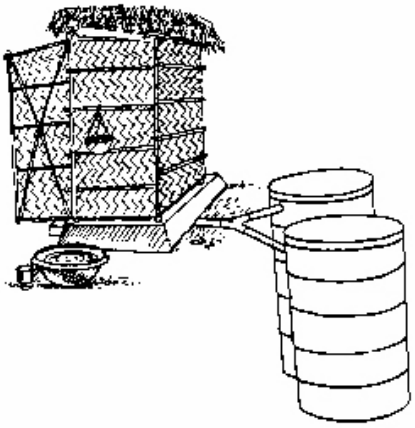


Figure 5.6b: Latrine Types Promoted under the Project

Support to private sector for latrine production centres and mobile centres

Production and selling centres of latrine components is needed to meet the increased demand for sanitation facilities at community level. The private sector can play an effective role in service delivery. An effective demand is indeed create a greater incentive for private enterprises to become involved. Based on field observations, the Field Agencies identifies the areas, which are not yet served or are poorly served.

Private Latrine Producers

The private sector is very efficient at low-cost production, but it they are unaware of the effective demand in a community. The Field Agencies at Union level contacts the private entrepreneurs, informing them of the specific needs for latrines in the different Unions and trying to encourage for their intervention. It is also expected that an increase in the demand will spontaneously encourage an increased number of new entrepreneurs to join the sector and to open new latrine production centres in areas of low coverage and low competition.

The project provides support to strengthen the private sector capacity to respond to an increasing demand. This support focuses on the establishment or rehabilitation of private latrines production centres that owned by poor people. The Union WatSan Committee and the SAE assisted by the Field Agency selects potential latrine producers from the poorer segment of the concerned communities. The selected individuals or groups of individuals have given seed money, tools, information and communications material, training and continuous guidance.

5.1.5.2 School Sanitation and Hygiene Education

There are more than 78,000 primary schools in Bangladesh. Still more than 30% primary schools do not have adequate sanitation facilities and/or safe water. A study in 1994 showed that proper water & sanitation facilities in schools had increased the attendance of girls by 11 percent. Health & hygiene issues are incorporated in primary education but education system in these regards is not action oriented and so expected results not achieved. There are about 17,000 secondary & junior secondary schools in the country. It is observed that there is a serious lack of adequate water and sanitation facilities in secondary schools. In particular, adequate sanitation facilities for adolescent girls are almost completely absent. The Government is promoting higher education for girls by providing special incentives and stipends, but the lack of proper water & sanitation facilities make girl students, in particular, more reluctant to attend full time school.

Schools are a stimulating learning environment for children. A safe learning environment is a pre-condition for joyful learning which facilitates the development of the child's potential. Previously software activities followed the provision of hardware support to the schools, which meant that primary schools in a district or Upazila were not covered with sanitation and hygiene education activities if they did not require WatSan facilities. During the last SSHE revision Directorate of Primary Education (DPE) suggested that all primary schools in a District or Upazila should be covered particularly with software activities. Therefore, under the revised SSHE, all primary schools (GoB and registered non-government) of a District or Upazila will be covered with software activities while an estimated 30% of all primary schools also require WatSan facilities.

UNICEF, in collaboration with Public Health Engineering Department (DPHE) and Directorate of Primary Education (DPE), initiated School Sanitation program as a pilot projects in 1992 in 16 districts. Till the year 2000 the project has covered about 5,000 primary schools in 44 districts.

Based on the lessons learnt the project strategy went through major revisions in 1995, 1998 & 2000. Currently School Sanitation & Hygiene Education (SSHE) is a major component of the GOB-UNICEF Project (Environmental Sanitation, Hygiene & Water Supply in Rural Areas) supported by DFID. Under the current strategy all the primary schools of 37 selected Upazilas (sub-district) in 10 districts are being covered. It is now the development phase of the whole project that has started in 2002. The total number of primary schools under current SSHE component is 4,843.

Major Interventions of SSHE

The major interventions under SSHE include:

Preparatory Activities for School (for all schools in project area)

- School Level Assessment & Plan for joyful learning environment
- Local fund generation for development activities, repair & maintenance of facilities at school

Response to Demand for WATSAN Facilities (if needed)

- Application for watsan facilities by school
- Selection of schools for WATSAN facilities based on criteria for selection
- Agreement between selected School & Support Agencies for facilities
- Installation of watsan facilities at school through School Mgt. Committee

Behavioural Development (for all schools in project area)

- Plan for use/maintenance & behaviour development
- Sanitation/Hygiene Lessons (School Package & IEC materials)
- Child to child & child to community motivation

Figure 5.7: Newly built WatSan Facilities

Participatory monitoring by Student Brigades in their own clusters

Student Brigade (SB) activity is a beauty of SSHE program here. It is promoting the Child to Child and Child to Community approach for motivation on sanitation & hygiene. All students of class IV & V are divided into groups of 5/6 neighboring children who are termed as Student Brigades. The catchment area of primary schools is marked by DPE. The total households of school catchment area are divided into number of clusters so that the number of clusters is equal to the number of Student Brigades one Brigade in each cluster). Teachers train the Brigade members on participatory monitoring and motivational activities. Brigade members monitor and motivate sanitation & hygiene behaviour in households of the respective cluster. It is helping them to own the results and achievements together with their family members. This is a "Learning by Doing" activity for the children. The Brigades fill in monitoring formats twice in a year. Formats are compiled at school, which shows the status and progress in terms of hygiene behaviour of the community.

UNICEF supported SSHE activities cover more than 4,800 primary schools out of more than 78,000 primary schools in Bangladesh. About 1,300 schools have so far been selected for new water and sanitation facilities or for major repair of them. Construction is going on in phases,

Watsan facilities in 1,500 primary schools will be completed by December 2003,. Schools are covered with latrines separately for girls & boys, water point with water tank to ensure running water inside latrine and approach road. A School Package (supplementary colourful & pictorial books & flip charts for class I-V), an instruction book for teachers, training manuals for the primary education officers and teachers, manual on school level planning, designs and construction guidelines of watsan facilities in school, formats for student brigade activities have been developed. The primary schools prepared their annual plan and they have indicated SSHE lessons and demonstrations in their class routine. Student Brigades are formed in the schools and they made the first survey in their community clusters. Community members are happy with Brigade activities and Brigade members feel proud of their role in the cluster.

Lessons Learned

- Provision of Watsan facilities increased girl's attendance by 11%.
- 80% students interact with family on sanitation and hygiene practices acquired at schools resulting in higher sanitation coverage in the catchment areas.
- Involvement of SMC created ownership and expedited construction process
- School environment was found clean for 55% cases, therefore remaining 45% cases are still remained unsatisfactory.
- In 70% programme schools latrines are used regularly but 30% still have problems.
- IEC materials are used in 80% schools but nor regularly.
- In 35% cases water system is non-functional.

4.1.5.3 DPHE-UNICEF Environmental Sanitation, Hygiene and Water Supply in Urban Slums and Fringes Project:

It is found that there is a high rate of diarrhoea incidence among children living in the slums. In a UNICEF urban project design workshop in 1998, the poor environmental sanitation condition, lack of awareness about safe hygiene practices and inaccessibility to safe water were identified as the core problems which caused a high rate of diarrhoea incidence among the children of slum dwellers. For under-served slum areas, which give rise to particular concern. For example, it is estimated that only 14% of slum households in the metropolitan cities have sanitary latrines (water seal 6.6% and pit latrine 6.9%, Source: Progotir Pathey 2000). Therefore, the vast majority of the people living in urban slums continue to use unsanitary latrines or practice open defecation. There is also widespread use of hanging latrines. 86% households of metro city slums have hanging latrines, which pose a particular threat to both health and the environment. Personal hygiene is also a concern, when it is estimated that only 6% of people living in slums wash hands with soap and water after defecation.

It is found that 49 vector borne diseases are directly and indirectly related to solid waste pollution. Proper management of solid waste is becoming a major concern for urban cities and towns in Bangladesh. In the slums, inadequate collection, disposal and unhygienic method of recycling of solid waste is the principle contributing factor for environmental degradation and resulting health risks.

An intensive hygiene promotion component was initiated in 2000. In the project, a target-focused hygiene behaviour change programme was designed considering the need and roles of the different target groups. Women, men, adolescent girls and boys and children were considered as the important channels for hygiene education dissemination and motivation at both the household and community levels.

About 1000 water and sanitation facilities were constructed in the 14 City Corporations/Pourashavas during 1998-2001. Deep tubewells, Tara tubewells, ringwell, stand posts and community latrines were the major hardware interventions.

Based on the past experience and lessons learned, UNICEF and DPHE together with the concerned City Corporations/Pourashavas came forward to develop the Environmental Sanitation, Hygiene and Water Supply in Urban Slums and Fringes Project. The implementation of the project activities began in July 2002 in the 14 City Corporation/Pourashavas. The objectives of the project are:

a) To increase the provision of safe water facilities for drinking and for all domestic purposes in the project areas.
b) To achieve 60% use of sanitary latrines among the slum and fringe dwellers of the project areas.
c) To raise the level of personal hygiene practices especially proper hand washing practices to 60% among slum dwellers of the project areas.
d) To improve environmental sanitation of the project areas through the provision of community latrines, garbage disposal facilities, drainage facilities etc. in the project areas.

Strategies and Approaches

The following strategies and approaches are being considered:

- Needs Assessment of the Existing Situation: Before providing an intervention, participatory needs assessment was conducted to involve the community in the planning and decision making process for the provision of appropriate water and sanitation facilities. Community mapping, environmental mapping, focus group discussion etc. participatory techniques were applied for involving community in the needs assessment process with expected more than 50% participation of women.

- Creating Demands through Hygiene Promotion: Community mobilization and hygiene education is the very heart of the project, which leads to demand creation and response regarding safe hygiene practices, addressing the needs of these slum people, gender equity etc. For addressing all these issues, especially hygiene behaviour change/development, the local NGO & UDC staff needs a systematic training programme over the period of their involvement.

  To motivate the slum dwellers, target focused, intensive hygiene motivational activities will be undertaken with the five target groups (women, men, adolescent girls and boys and children). To ensure the effectiveness of motivational activities, a series of sessions with the same target groups will be conducted for a specific intervention area. Special hygiene motivational activities will be organized for the men also to motivate them about safe hygiene practices and to create a supportive environment for improved hygiene education at the community and family level. One of the objectives of hygiene promotional activities is also to generate demand for water and sanitation facilities so those target level households are willing to have these facilities. Similarly water and sanitation facilities are made available where demand has been created and the users are prepared to participate in sharing of costs in operation and maintenance.

- Gender Mainstreaming: Both women and men of slum communities are the primary stakeholders of the project and will benefit from the programme. Women's groups will especially benefit due to the reduced time for collection of water and improved family health

status. It is also quite evident that the unhygienic defecation practices (especially open defecation) create inconveniences and lack of privacy for women and adolescent girls, which in turn create stress and health problems. Therefore, when the water and sanitation facilities are installed, the comparative relief will contribute manifold benefits. The women of the slum community have been involved as the caretakers of the community water and sanitation facilities, which will ensure sustainability of the facilities/systems as well. Technical training has been provided to the different women groups for repairing tube wells, care taking, savings etc. Hygiene motivational activities will also be conducted with the men to have active support for arranging hygienic latrines and personal hygiene practices. At the PIC (Project Implementation Committee) level, there are a majority of women members to ensure women's participation in the planning and decision-making process.

- Strengthening Local Govt. Institutions: The community level committees, Project Implementation Committees (PICs) will act as focal points for all project activities. Special attention will be given on the formation and operationlization of these multi-sectoral committees. The PICs are being involved in all decision- making process for implementation, especially on the needs assessment and site selection, planning and management of community water and sanitation facilities.

- Participatory Monitoring by the Community: It has been proved that the community itself is the best place to monitor the development/changes of hygiene behaviour. Considering the acceptability and easy access to the neighborhoods, the adolescent girls group will be trained to conduct participatory monitoring in the community. Special attention will be given so that they will not be exposed to harassment during the monitoring activities.

- Wide Range of Technological Options: A range of technological choices for the water and environmental sanitation will be given according to the geo-hydrological conditions, community preferences and the local condition of the slums. A wide range of ”Child and Women Friendly” community Watsan options has been developed for the slum people. To bring a sense of ownership among the project stakeholders, the City Corporations/Pourashavas and the slum community have been contributed some proportion of capital cost for hardware installations in their project areas. For maintenance and operation of the community water and sanitation facilities, the community is generating funds.

Major Components of the Project

The major components of the ongoing Environmental Sanitation, Hygiene and Water Supply in Urban Slums and Fringes project are as follows:

Hygiene Promotion :

The hygiene education component is the centre of the project intervention. An intensive hygiene promotion component was initiated in 2000. In the project, a target-focused hygiene behaviour change programme was designed considering the need and roles of the different target groups. Women, men, adolescent girls & boys and children were considered as the important channels for hygiene education dissemination and motivation at both the household and community levels. About 450 NGO workers, Urban Development Center (UDC) staff in five City Corporations and nine Pourashavas were trained on hygiene behaviour change programme, participatory monitoring and on different Participatory Rapid Appraisal (PRA) and Participatory Action Learning (PAL) techniques.

The major interventions of the hygiene education and social development are as follows:

- Diarrhoea prevention
- Sanitation
- Personal hygiene
- Food hygiene
- Use and management of safe water
- Environmental cleanliness and solid waste management

In the project, a target focused hygiene behavior change programme is designed considering the need, and the roles of the different target groups. Women, men, adolescent girls, adolescent boys and children are considered as the important channels for hygiene education dissemination and motivation at both the household and the community levels. For each of these target groups different themes were designed. Followings are the five different themes for the five target groups:

Figure 5.8: Themes for hygiene education component

Participatory Monitoring by the Adolescent Groups

For the monitoring purpose, the local NGO workers from the slum community selected the adolescent girls from the slum community. The adolescent girls were selected considering their easy access to their neighboring households. Also for the adolescent girls it is easy to observe the real hygiene behavior of the community. Grade V was considered as the minimum qualification for the adolescent girls.

Prior to the adolescent monitoring, the adolescent girls identified the six indicators of hygiene practices. Accordingly a monitoring format was developed. The six monitoring indicators for the adolescent girls are as follows:

- Use of sanitary latrines
- Washing hands before eating and after defecation
- Use of tubewell/Tap water for drinking and cooking
- Disposal of garbage in a fixed place
- Regular nail clipping by the family members
- Diarrhea prevalence of children below 5 years age during the last 15 days

After selection of adolescent girls, a tailored, intensive hygiene education training was provided to build their capacity on different monitoring tools particularly, on observation technique and reporting system. 15-20 households were given to each of these adolescent girls for monitoring purpose. The NGO workers helped the adolescent group to identify the neighbouring targeted households for this monitoring.

The respective NGO worker then compiled these data from the adolescent girls in a Format. This compiled monitoring data were also sent to the respective City Corporation/Pourashava on a monthly basis.

Figure 5.9: Intensive hygiene education with the adolescent girls

At the community level, the respective NGO worker together with the adolescent girl shared the monitoring results with the women group in a pictorial chart. Figure 5.10 shows the result-sharing format with the community by the adolescent groups. The monitoring result-sharing sessions found to be very effective since it created some peer pressure among the women group for improved hygiene behavior. Then, together with the community they fixed their target for the next hygiene practice.

No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Figure 5.10: Monitoring Result Sharing Format

The adolescent girls are not only actively involved in the monitoring process but also in disseminating of the safe hygiene practice massages to the community. It is found that both the family and the community accepted this new role of adolescent girls. It has been observed that the adolescent girls now feel now more confident to convince the community for improved hygiene practices. These groups can lead any social development movement in future.

Able to influence family decision making process: It is quite evident that they are quite able to influence the family decision making process. For instance, they influenced their parents to arrange soap for hand washing particularly before taking food and after defecation. Although they shared all the responsibilities of looking after the household chores, earnings, and looking after their

siblings, they felt that by taking these responsibilities they are well recognized as very important members of the family. The time period for this participatory community hygiene monitoring was from January 2001 6 months and from March 2003 to date. In total about 5000 adolescent girls in 12 City Corporations/Pourashavas were involved in the participatory monitoring purposes.

Child and Woman Friendly Watsan Facilities

Inappropriate choice of technology and inadequate design and installation of facilities caused an unsatisfactory level of functioning of the facilities during the first phase of the project. Limited technological options, lack of considerations of the local conditions and gender led to inappropriate technological options for the users. An agency was selected to review the existing water and sanitation facilities and design the facilities considering the needs, geo-hydrological condition and affordability of the community.

Accordingly a wide range of community latrines considering the needs and socio-cultural behavior were designed. The main features of community latrines are:

- A range of latrine options (1-unit, 2-unit, 4-unit and 6-units)
- Separate latrine block for men and women
- Bathing space in the latrine block
- A child-friendly latrine with the Women's block
- Water point within the latrine block

Pilot Schemes on Solid Waste Management and Composting

Waste Concern, a reputed research-based agency has been involved in building capacity of the City Corporation for proper solid waste management and composting technology. Community mobilization activities on environmental cleanliness programme in 14 City Corporations/Pourashavas were implemented. Promotion of decentralized approach of community-based solid waste recycling and composting will be incorporated. This component will also generate income and employment opportunities in the slum communities. Waste Concern will help to promote marketing of compost and establish linkage of the community entrepreneurs with the compost buyers. The major activities of the pilot schemes are:

i. Baseline survey and research on waste generated will be conducted to have greater understanding of the quantity and quality (composition) of waste in the selected communities.
ii. Community mobilization and environmental cleanliness programme to improve the condition of the project areas.
iii. Training of the CBOs, local NGOs, municipalities and private entrepreneurs regarding recycling and composting. A training manual (in Bangla) is already developed in this regard.
iv. Introduce composting system and provide hands-on training in the use of the proposed composting system to improve the environmental condition of the slums and low-income settlements.
v. Establishment of Ecological Park with compost plant, sale centre and a demonstration compost garden.

5.1.5.4 Support to Local Initiatives taken by Local Government Institutions and Civil Administration

UNICEF has been supporing local initiatives for achieving 100% sanitation coverage in four Upazilas of Rajshahi Division since 1999. There have been several schemes where local government has led the initiative, where latrine construction has been with zero subsidies. Some examples are the Patgram experience in Lalmonirat District during 1999-2001 and the recent Rajarhat 100% sanitation programme in Kurigram District.. The only external support for this effort was provided by UNICEF in the form of communication materials and support for training.

Strategies

- Motivation and awareness generation
- Repeated dissemination of the messages.
- Convergence of resources
- Effective coordination and follow-up
- Adaptation of Process Approach Multiple Channel Dissemination Strategy
- Zero Subsidy

Major Activities

a) Baseline Survey
b) Local level capacity building
c) Awareness generation and motivational activities
d) Teachers of the educational institutions motivate their respective students to use sanitary latrines
e) Student brigade activities
f) Generation of Savings
g) Production and supply of sanitary latrines
h) Project Management

The success of these experiences brought attention of the civil administration of Rajshahi Division. After remarkable achievement of these two Upazilas (Patgram Upazila of Lalmonirhat district and Rajarhat Upazila of Kurigram district),for achieving 100% sanitation coverage the local Civil Administration is now showing interest to take similar initiatives in their respective Upazilas. It is also found that at the Upazila level the sanitation movement is very effective to mobilize resources at the local level and also draw attention at the districts and divisional level civil administration.

5.1.5.5 Support to National Sanitation Campaign

Each year during the 1994 to 1998 period, the Government of Bangladesh, with the support from UNICEF, observed a specific week to promote sanitation through an intensive campaign. Unfortunately, this program was discontinued after 1998 due to resource constraint.

Learning from the lessons of the earlier sanitation weeks, a month long National Sanitation Campaign was formally launched in October 2003 under the leadership of Local Government Division of Ministry of Local Government Rural Development and Cooperatives.

UNICEF-Bangladesh together with other development partners and NGOs under the Umbrella of Bangladesh Chapter of the Water Supply and Sanitation Collaborative Council (WSSCC-B) tried to

bring sanitation as a priority concern to the Government of Bangladesh. UNICEF developed a concept note on the National Sanitation Campaign for Bangladesh in this regard. The concept note was adapted later on by the Local Government Division, Ministry of LGRD&C. UNICEF has also been supported the Secretariat for the National Sanitation Campaign and SACOSAN.

UNICEF together with the other task force members took the leadership role regarding the development, printing and distribution of the Communication materials developed for the National Sanitation Campaign.

UNICEF also took the lead role for the development of the nation wide baseline survey tools, which was undertaken by the Local Government Institutions during August –September 2003.

5.1.6 Conclusions

Given the challenges that would have to be met in order to achieve total sanitation, it is expected that the exiting trend and government policy needs to be altered in order to expedite the process. Also sectoral agencies should change their conventional service providers' role to the facilitators' role. All stakeholders would work together to achieve the goal. These stakeholders include Government at national and local levels, development agencies, NGOs and the households themselves. To galvanize support, there would need to be a series of consensus building actions, strategy development and implementation plans.

The most important challenge in front of us is: "How can we all improve our working together to help Bangladesh achieve its Sanitation target".

5.2 Motivation and Collective Action: Religion and Health Project

Lopen Penjore
UNICEF-Bhutan

National Policy Directives

"All of us, who are part of the human family, find increasing economic welfare important in our lives. Together with such improvements, it is desirable to be healthy, happy and peaceful. Many ingredients must be present to make all individuals of the country comfortable and content….Among many ways and means….the Government is pursuing towards this end, one of the most important policies is the promotion of a household latrine in each house and safe drinking water, in both towns and villages…."
His Majesty the King in Royal Decree on Water and Sanitation, issued in August 1992.

Executive Summary

Bhutan's religious communities wield great socio-cultural and spiritual influence in society. This claim is evident from the history of Bhutan, which is steeped in Buddhism. The clergy and members of the religious community serve as custodians and upholders of fundamental social and moral values in rural and urban Bhutan.

This country paper is prepared for the High-level South Asian Ministerial Meeting to be held in Dhaka from 21-23 October 2003. The overall goal of the conference is to accelerate the progress towards improving the quality of life through sanitation and hygiene promotion. This country paper is based on the lessons learnt and experiences gained over the years as far as the religious communities are involved in health and hygiene promotion. It also explores future opportunities for the involvement of the religious communities.

The religion and health project aims to contribute to the long term results of improved health of children and the community. In order to do that we need to improve sanitation hygiene practices of the monks and build capacity of religious practitioners to provide advice on health and childcare to community members. Assessment undertaken in 2002 indicated positive impact on behavior and attitudinal changes of religious practitioners, improved hygiene practices of the rural people, and able to remove some of negative practices such as sucking blood when sick and increased referrals to health facilities. The findings also indicated that the status of hardware inputs to the religious institutes needed desired level of maintenance. The involvement of religious communities in health and hygiene improvement was a strategically important by the virtue of their position and role in the society. However, much need to be done as many monastic establishments have not yet reached with improved water supply and sanitary facilities and capacity of the service providers (Monks) need to be enhanced.

There is also a need to support continuous maintenance and provision of infrastructural facilities to sustain and promote health programmes and provide supplementary health promotional materials to improve hygiene.

His Holiness Signing the IDD Statement

5.2.1 Background to the project

The religious community in Bhutan is one of the most influential groups of people in the country, and it also operates the oldest institutional system of education. Since the Department of Health Services desired to reach the community through all possible existing channels, the idea of religious involvement in health promotion was first conceived in a national workshop on Religion and Health for the first time in October, 1989, at Thimphu. The workshop was jointly organized by the Council of Religious Affairs, (Dratshang Lhentshog) and Department of Information and Departments of Health, in-conjunction with UNICEF which, besides funding, also fielded eminent resource personnel.

The workshop was a grand success. The need to incorporate modern health practices into the awareness of the public was unanimously agreed by the workshop.

The religious community welcomed their role as setting an example to the community, and educating them as and when they come in contact. In light of

the regard and respect in which they are held in the Bhutanese community, improvement in health status can be really enhanced through their motivation.

However, in order to implement the health education activities, the religious communities need to be well equipped with the knowledge, skill and means to practice it. The religious institutions should be the starting point for practicing the basic concepts of sanitation and hygiene.

The religious institutions play a special role amongst other during the time of illness as people turn to them for help even before they seek modern health care.

This country paper provides an introduction to the role the religious community in Bhutan in support of the health and well being of the general population and women and children in particular. It also examines strengths, weakness and opportunities of religious involvement in the health promotion since its inception in early 90's.

5.2.2 Country Context

The Kingdom of Bhutan lies in the eastern Himalayas, bounded by the Tibetan plateau in the north and the Indian plains in the south. Bhutan's total area is approximately 40,077 km^2. The estimated population of Bhutan in 2001 was 698,950, with a male: female ratio of 1:0.98. The distribution of urban and rural population is estimated at 21% and 79% respectively.

Bhutan is a monarchy with the King as head of state. The Government of Bhutan consists of seven ministries and several commissions and autonomous bodies. The head of the government is headed by a minister for a one-year tenure rotated among first five ministers that receive the highest votes of nomination by members of the National Assembly. At the sub-national level, the country is administered through 20 Dzongkhags (districts) and 201 Geogs (village blocks).

5.2.3 Role of Buddhism

Buddhism has always played an important role in daily life of the Bhutanese people. Buddhist philosophy and beliefs are at the heart of Bhutanese culture, tradition and way of life, and monks and monastic institutions uphold fundamental social and moral values besides serving as custodians of culture and tradition.

In the medieval era, only monks could attain the highest office, and they shouldered all civil responsibilities. In fact, monasteries were the only centers of learning, and education basically comprised religion and spiritual practice. It is believed that a successful scholar brought merit to himself, his family, his community and to his country.

While the direct political influence of the clergy has undergone some changes, their ecclesiastical function continues to dominate the society. The Je Khenpo occupies a prominent place in the social and cultural life of the people. Out of 150 National Assembly (parliament) seats, ten are reserved for monks, and the monk body occupies two seats of six Royal Advisory Councillors, who are also members of the cabinet.

Bhutan has maintained and preserved its independence and sovereignty with a distinct age-old culture and tradition rooted in Buddhism. The succession of visionary monarchs were able to balance development and tradition, and modernise the country without compromising its rich cultural heritage and traditions.

5.2.4 Bhutan's Development philosophy

The most important gift that His Majesty King Jigme Singye Wangchuck has given to his people is the vision of Gross National Happiness. Encompassing socio-economic, cultural and environmental dimensions, the basic principle underlying this philosophy is the consideration of gross national product (GNP) as only one of the means to attain happiness. Today this noble concept of Gross National Happiness (GNH) is the guiding philosophy of modern development in the country.

The Royal Government's publication, Bhutan 2020- A Vision for Peace, Prosperity and Happiness, states: "Monks and nuns are held in high esteem and treated with utmost respect. This makes them especially qualified to provide counseling and guidance in respect of emerging social problems that are threatening to unravel the strands of our society."

5.2.5 Health

Over the decade, the health status of the people as gauged by several indicators as shown in the table below is seen to be improving. The growth rate of population[4] has been reported to be down from 3.1% in 1994 to 2.5% in 2000.

Table 5.3 : Comparative Health Indicators

Indicators	1984[5]	1994	2000[6]
Infant mortality rate per 1000 live births	142	70.7	60.5
Maternal mortality rate per 1000 live births	7.7	3.8	2.55
Under 5 mortality rate per 1000 live births	na	96.9	84
Crude birth rate per 1000 live births	39.1	39.9	34.1
Crude death rate per 1000 live births	19.3	9	8.64
Life expectancy	48	66	na

Note: na = 'not available'

Rural household sanitation coverage in terms of latrines constructed has accelerated during the last decade, mainly as a result of the royal decree in 1992 that mandated very household to maintain a latrine. Rural sanitation coverage expanded from 50% in 1990 to 87% in 2000, whilst in the urban settings, the sanitation coverage has fallen from 80% in 1990 to 77% in 2000. The drop in urban sanitation coverage is mainly due to growth of urbanization affected by rural to urban migration.

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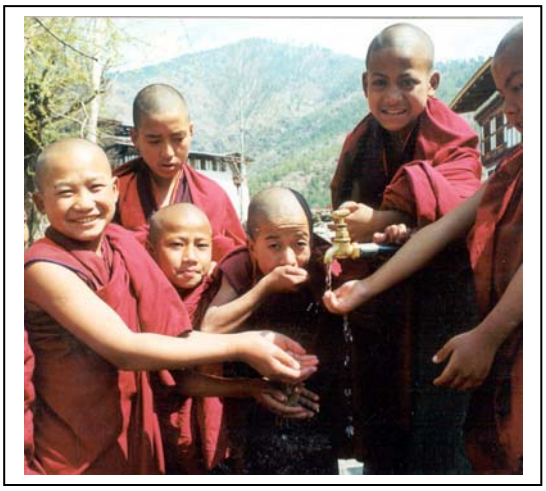
[4] Source: Annual Health Bulletin, 2000, Department of Health Services, RGoB
[5] Source: Table 28.2, Page 165, Vol. I, Main Document, Eighth Five Year Plan, 1997-2002, RGoB
[6] Source: Table 12, Page 75, Main Document, Ninth Five Year Plan, 2002-2007, RgoB
"Nu" = Ngultrum, the Bhutanese currency: ≅ Nu. 49 / US$

Among the leading causes of mortality under 5 years, the most notable is respiratory infection, followed by diarrhoea and dysentery, skin and eye infections, parasitic infections and others. The decreasing trends in reported cases of hygiene related morbidity is the result of strong collaborative efforts of the Ministry of Health and and the Council for Religious Affairs with support from development partners.



5.2.6 Programme linkages

The programme linkages with Council of Religious Affairs and Ministry of Health is as indicated in the diagram in Figure 5.11.

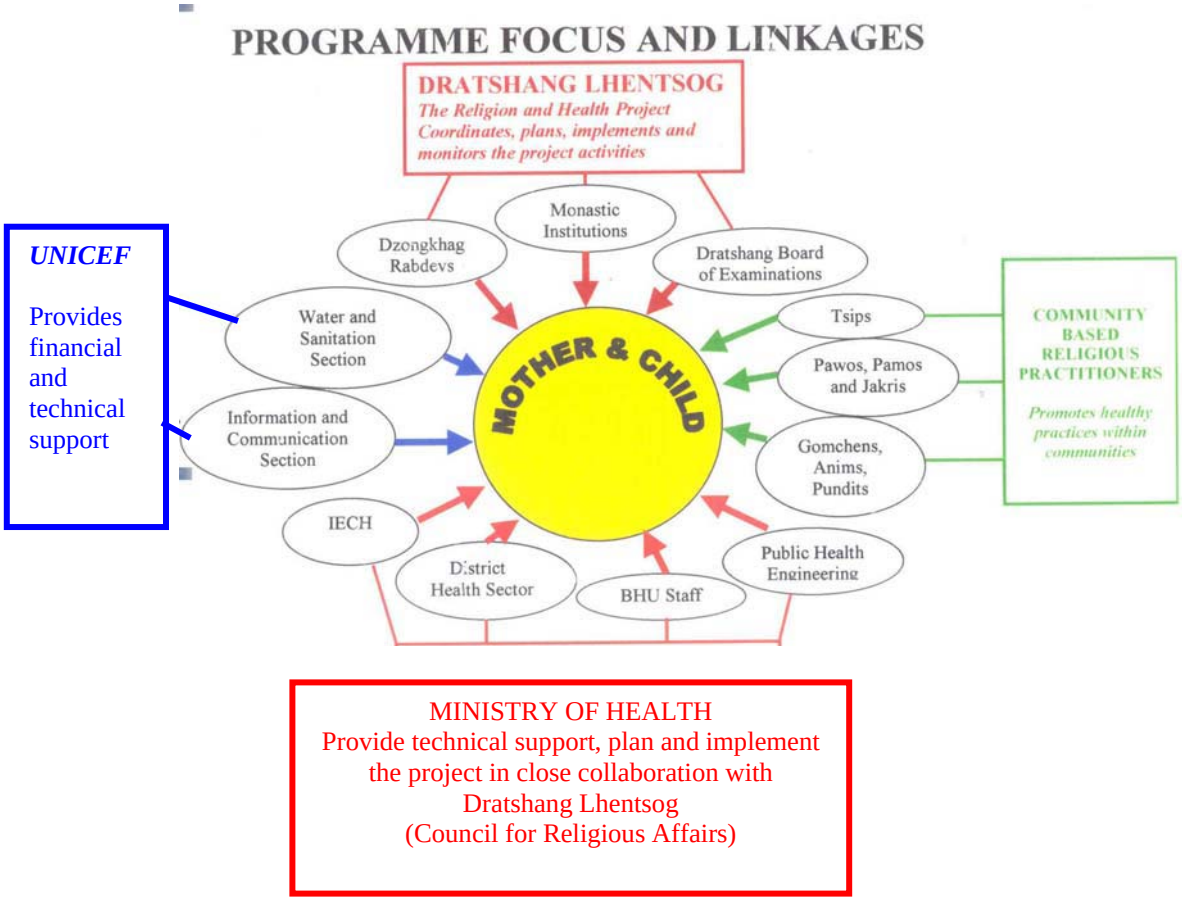


Figure 5.11 : Program Focus and Linkages

5.2.7 Structure of religious establishment

A Central Monastic Body (Main Sangha Centre in Thimphu/Punakha) and six registered Dratshang (Sangha Centers), sixteen district Rabdeys, 13 Sheydras (Buddhist colleges), and 30 Drubdras

(meditation centers and 15 nunneries). These are state-sponsored religious institutions in the country. The total of 5,225 registered monks sponsored by the state. There are also 217 Gomdeys (non-institutional village-based) which consisted of 4905 lay monks. Provision of water and sanitation to these home-based has not yet been extended through the project, however these lay monks are included in the community level training on health and hygiene promotion through the project.

5.2.7.1 Zhung Dratshang (The Central Monk Body)

The chief abbot, the Je Khenpo who is equivalent to the king heads the Dratshang. He is assisted by four lopens (masters) with ranks equivalent to ministers. The headquarters of the Central Monk Body is based in Thimphu in summer and Punakha in winter. All 20 districts have a Dratshang headed by a Lam Neten who is appointed by the Chief Abbot. The Lam Neten holds a post equivalent to the Dzongdag (district commissioner). The Je Khenpo also appoints the heads of some important monastic establishments.

5.2.7.2 Dratshang Lhentshog (The Council of Religious Affairs)

This high level nine-member commission was formed in 1984 with the Je Khenpo as chairman. It has a dual aim of promoting the welfare of the Zhung Dratshangs, Rabdeys (sangha) and other religious communities in restoring their traditional relevance in a modern Bhutan. Since its inception, the Council has actively involved itself in social and religious activities not only to protect age-old traditional values but to promote it among the younger generation. A full-fledged Council Secretariat deals with the administration, and implements the policies of the Council. Religion and Health Project is one of section under the secretariat.

5.2.7.3 Sheydra, Drubdra and Nunnery

Sheydra is a Buddhist college where monks stuy Buddhist philosophy, while Drubdra is a retreat or meditation center. Mostly senior and learned monks go on religious retreat to accumulate virtuous merit in order to attain nirvana (enlightenment).

Anim Dratshang is a nunnery where anims (nuns) pursue Buddhist studies. The number of nunneries has been increasing over the years.

Tango Buddhist College

5.2.8 Gomdey

Monasteries in local communities where lay monks or gomchens study under a lama or lopen (teacher) is called a Gomday. Gomdays are a category of FBO outside the main orbit of formal

theocratic establishments. Most of them are formally organised in different monasteries within the state monastic structure. Gomchens are professional non-celibate practitioners and raise families. The gomchens are easily accessible to the people, especially in the rural areas.

5.2.9 Shamans or Traditional Healers

This group of practitioners include shamans like paw, pamo, jomo, terda, bonpo, jakri etc. They do not belong to any organised groups, yet they play an important role through their shamanistic rituals. Despite being few in numbers, they provide various spiritual and curative services in almost every aspect of life. An interesting attribute of this groups is that they learn the mantras orally and do not have any scripted documents. It is only through oral transmission that the shamans have survived.

5.2.10 Outline of Current Activities by Religious Groups/Leaders

Bhutan's clergy and religious practitioners have always been involved in social welfare activities and take on many civic responsibilities. The formal participation of the religious communities in various health progarmmes dates back to 1989 where they first formally participated in child immunisation, rural sanitation and nutrition programmes. Since 1993 their participation extended to family planning, tobacco, alcohol and substance abuse control and iodine deficiency disorder control programmes. Their participation has resulted in improved sanitation standards and increased the number of referral cases to health centers.

5.2.11 Water, Sanitation and Hygiene Education :

Of the 80 major religious institutions, 67 per cent of these institutions have been covered with improved water supply and sanitation provision. While water and sanitation is important, it is equally important that the users are aware of the importance of personal hygiene as well as the environmental sanitation. Thus the major focus of the project is the capacity building. More than three thousand monks and religious practitioners have so been trained. The traditional healers in the community are the primary audience as they the first level of contact when they fall sick.

In addition to health and hygiene workshop, Operation and maintenance workshop is also part of the regular programme. The workshop is conducted in a very participatory manner.

5.2.12 Strengths

1. Well development network of religious establishment exists all over the country. This provides the impetus for a wider coverage of the health and hygiene advocacy.
2. Religious leaders can be effective agents of change as they are highly respected and regarded by the general public.
3. Each rural household have to perform annual religious rituals (puja) and thereby the religious communities are easily accessible upon request by the community for their religious performance.

5.2.13 Weaknesses:

1. Reaching health care to the people is an enormous task owing to the sparse population spread across the country's mountainous terrain.

2. In general the celibacy practiced by members of monastic institutions make it impractical for them to demonstrate other sensitive health issues.
3. Lack of scientific knowledge and technical skills limits the scope of the religious practitioners.
4. A lack of adequate water and sanitation facilities in many of the religious institutions make them poor role models for health as they are unable to practise hygiene.
5. Limited time for advocacy as they have their own religious responsibilities and obligations assigned by the Council of Religious Affairs.

5.2.14 Opportunities

1. The high reverence and faith accorded to the religious groups can be further capitalized for accelerating sanitation improvement.
2. Tackle emerging health problems such as substance abuse, HIV/AIDS etc.
3. Hygiene messages could be advocated during the blessing congregation.
4. District-based religious Heads (Lam Netens) can play important roles in advocacy and campaigns during the district-based religious festivals and congregation.
5. Monastic schools curriculum to include health messages

5.2.15 Thematic Discussion on Motivation and Collective Action

There was widespread appreciation of both presentations. Interest in particular was shown towards the school-health programme of UNICEF-Bangladesh, with participants raising questions about how the programme was run, how teachers were motivated and whether there were any incentives for the teachers. The participants also appreciated the notion of Monks as change-agents in UNICEF's Religion and Health Project in Bhutan.

The chairman of the session stressed user-motivation, enabling-environment-motivation and institutional-motivation as the key areas to target when addressing motivational behaviour. The subsequent discussions reflected this assessment, with participants arguing on the whole that:

- A focus on community behavioural change was seen as being the primary policy goal, with the acquisition of latrines representing a complementary and instrumental goal. While in the Religion and Health Project, installation usually preceded motivation campaigns, a number of participants stated that a focus on user-motivation should actually precede installation.
- The inclusion of religious teaching institutions in sanitary awareness campaigns was seen as a positive means to motivate communities into better hygienic practices. There should therefore be greater recognition of the potential for religious institutions, religious places, religious schools and events to influence community opinion and improving hygienic sanitation behaviour.
- Programmes should attempt to link sanitation promotion with awareness promotion for environmental concerns, as this sort of focus takes issues from the personal and household level, to a community and collective level.

Thematic Group 2 **: Supply and Demand**

5.3 Demand and Supply in Sanitation and Hygiene

Pete Kolsky
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5.3.1 Nature of the challenge

- Lack of demand
- Frequent lack of interest (political will)
- Lack of ownership…often split between Departments
- It's not cheap
- It involves deep psycho-cultural issues
- Like all public goods, subject to politics
- Often technically difficult (esp. urban)
- Hygiene promotion is poorly understood…

…other than that, it's straightforward!

5.3.2 Some basic truths about sanitation

- It is about behaviour and hygiene, not (just) about building toilets
- It's a household decision: central and local government have a role, but the household is decisive in adopting a behaviour
- Children matter: 90% of health benefits are among pre-school kids… and worm infections among school-age
- Supply and demand are critical: sanitation needs to become an industry

5.3.3 Why Demand is important

- Why is water supply better addressed than sanitation?
  Very simply, because there is more demand for water supply than sanitation!
- If it's not wanted, it's not used
  No child should be an unwanted children…and no toilet should be either!
- Key to sustainability
  If people want it, it will happen… as long as they don't really want it, it won't.

5.3.4 Why do people want sanitation (demand study in Philippines)?

- Lack of smell and flies
- Cleaner surroundings

- Privacy
- Less embarrassment when friends visit
- Less gastrointestinal disease

Yet how do we sell it? “No urban demand without tenure!!”

5.3.5 Why Supply is important

- No point in stimulating demand that cannot be met (a personal confession from Lucknow…)
- What determines the long-term sustainability of any economic activity?
  - Can somebody make a living out of it?
  - If they can, it will happen… if they can’t, it won’t.
- Key challenge: to create a policy environment which stimulates sustainable demand and supply

5.3.6 The Sanitation MDG & Finance

Let’s not kid ourselves who pays for the sanitation MDG

- If it’s going to happen, it will happen with local resources: International cooperation may help a little on some issues
- Sanitation needs to become an industry, financed from the local economy: International finance can help at best on the start-up

5.3.7 So What do We do about it?

- Market Research Offensive to understand the market for household sanitation and hygiene;
- From that market research offensive, develop a program to address the opportunities that emerge;
- Major program on child sanitation and hygiene.

5.3.8 Market Research

Learn who's using and buying, who's <u>not</u> using and buying, and why.

a) Get the market professionals involved…those who do market research for soap, food, cooking fuel: Don’t just ask the sector specialists…we think we know it, but we don’t!!

b) Understand the provider's perspective on sanitation as a business.

What do those who currently provide rural sanitation say about constraints, opportunities?

- Talk to talk to small masons, builders and contractors, as well as NGOs

5.3.8.1 Some questions for market research

- Do you go nation-wide, or do you target promising areas and communities?
- Do you focus on “early adopters” (e.g. rural dwellers near towns, or districts which have already started) to stimulate a trend?
- What is a realistic price for the product?

- What is the cost for production?
- What are HHs willing to pay? For what features, demands, services?
- Let price guide product development

5.3.8.2 Hygiene Promotion & Sanitation Marketing

	Hygiene promotion	Sanitation Marketing
What's being promoted?	Behaviour	Hardware
Could you sell it for money?	No	Yes
Does it cost a lot of cash?	No	Yes
Does it involve credit?	No	Often
Does it require constant attention?	Yes	No
Prime audiences?	Whole family	Purse holder
Who is likely to do it?	Health workers	Masons
Is it easy to monitor?	No	Yes

5.3.8.3 After market research, then what?

1) Pilot campaigns for sanitation/hygiene promotion:
   - Mass media
   - Local Government
   - NGO and CBO neighborhood/household campaigns for addressing reasons why people do or don't adopt sanitation
2) Product and Price piloting and testing: SanPlat experience in Mozambique and elsewhere
3) Address other constraints: Is HH credit an issue? How best can one address this?

5.3.8.4 Major program on child sanitation and hygiene

- Obviously, look to help/lead for UNICEF on this
- More than "building school toilets"
- Do basic "market research". Understand the child's day at home and at school… examine school sanitation programs that work and don't work; what's difference?

5.3.9 "Going to scale": what do we mean?

- "Doing more of this activity": going from small pilot to national program in more localities by increasing "available resources"

- What are current resources in use, and can they be scaled? If not, what are alternative resources mixes? If I spend twice as much do I get twice as much output, or can I get it in half the time? Can I go nationwide in five years?

5.3.9.1 With ten times the money can we get:

- Ten times the cement and brick? Yes, in most places
- Ten times the masons? Yes, but with some training probably required
- Ten times as many trained animators? Yes, but with significant training requirements
- Ten times as many passionate animators? Possibly, but these are the heart of programs
- The necessary management structure, accountability and leadership? Possibly, but this is the critical system guidance

5.3.9.2 Changing the mix of resources

Money helps, but cannot substitute for everything

- Twice the money does not halve the time: Two buses don't arrive in half the time either!
- Compensating volunteers is crucial to sustaining participation, but cannot always triple commitment with tripling a salary!
- Roles and potentials of government, NGOs and the private sector need to be thought through carefully: these roles change at scale….

5.3.9.3 How to address scale?

- Make haste slowly: Go as quickly as you can, without collapse
- Try to develop an incremental scaling model
  - Don't assume a small-scale triumph can be multiplied by 1000…try 20 times first, then 100, then 1000
  - Not a balloon that pops, but "experiments with truth" of increasing size and complexity…and success!
  - Identify the limits, and address them

5.3.9.4 Some questions to discuss

- What do you know about sanitation as an industry in your country? Its issues of supply and demand?
- How would you find out more?
- How would it affect your policy?
- What would/could be the role of government in stimulation of demand?
- What are the real bottlenecks in "scaling"? How can we discover and address them before it's too late?

5.4 Private Sector in Meeting Demand of Sanitation Services

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5.4.1 Introduction

Over two decades of public-sector intervention, in rural sanitation (RS) in Bangladesh, has stimulated a demand for services, which the private-sector has responded well. From a virtual absence 25 years ago, a potential vibrant private-sector is now evident in RS in Bangladesh. The private-sector today accounts for more than eighty percent of sanitary latrines production centres in the country. Although the public and private interventions have increased RS coverage significantly, average figures conceal inequity of service access and disparity of coverage among and within regions.

The situation of the private-sector has further improved in the recent years. Limited studies in recent times assign a larger share of sanitation coverage to the private-sector. Factors that influence the growth of private-sector are not yet clearly understood. Understanding the factors and dynamics of the growth of the private sector may help in creating the policy environment for private-sector to flourish and play a greater role in RS sector.

In a resource scarce country, there is no option but to promote the private-sector. The Fifth Five-Year Plan (1997-2002) reflects an increasing dependence (56%) on the private-sector for national development. Obvious question then remains, how can public investments be best used to promote an increasing role for private-sector in sanitation services? Lessons from the past can influence future projects respond to user demands and the private-sector needs without distorting market or inhibiting private-sector growth.

Factors that influence the participation of private-sector are yet to be clearly understood. Understanding the factors and dynamics of the growth of the private-sector will enable future programmes in creating the enabling environment for private-sector to flourish and play a greater role in the development of sanitation services in the country.

With this context a study was undertaken to have better understandings on the factors that encourage and inhibit the role of private sector participation towards meeting demand in sanitation services.

5.4.2 Objectives of the Study

The objective of the study is to identify the factors that promote and those that inhibit the private sector participation in meeting demands of sanitation services.

5.4.3 Study Methodology

The methodology applied was firstly a critical review of the secondary sources of information particularly, sector programme and project documents, evaluation studies, review reports, policy documents, etc.

In order to bridge information gap and also to substantiate information gathered from the secondary source, the study methodology included data collection from primary source through field survey and consultation process or expert opinion survey of sector specialists including Government, Non-government, representatives of External Support Agencies etc.

Consultation with sector professionals, researchers and private sector; and finally collation, synthesis, analysis of the information and interpretation.

Structured questionnaires and checklist were designed and used. Bengali versions were put to field administration after these were-pre-tested at the field level. A total of 1240 respondents randomly selected, from 18 villages from three hydrogeological areas six from each area was the sample size.

5.4.4 Findings and Observations

5.4.4.1 Findings from users/owners of sanitary latrines

The use of sanitary latrines is found to be higher in the Coastal Saline Area (CSA) where intensive social mobilization activities were undertaken in quite a good number of Thanas with support from NGOs and CBOs.

Most of the sanitary latrines (66%) have been installed within last 4 years. This is consistent with the latest statistical details available. This shows that the installation and / or use of low cost sanitary latrines have increased significantly in the recent years particularly as a result of social mobilization and sanitation promotional activities under SocMob Project of Public Sector Agency with support from NGOs in the field. Table 5.4 shows years of installation of sanitary latrines.

Table 5.4 : Ageing of Installation of Sanitary Latrines

Years of installation	(%)
< 2 Years	37
2 - 4 Years	29
4 - 7 Years	16
> 7 Years	18
	100

Nearly 38% were of slab-pan-ring with water seal type while around 22% were of slab-pan-ring without water seal type. There were other combinations of the components of latrine in accordance with user choice. Home made type accounted for nearly 15% of the total respondents. Table 5.5 depicts various combinations of latrines.

Table 5.5 : Types of Latrines

	(%)
Slab-Pan-Ring with water seal	38
Slab-Pan-Water seal without ring	8
Slab-Pan-Ring without water seal	23
Slab-Pan without Ring & water seal	11
Pit & Slab	4
Home-made	16
	100

For all areas surveyed, the major share of supply of latrines has been through the private producers, accounting for around 60%. Home made latrines accounted for around 16%. Supply from Public-Sector sources accounted for only 11%. Thus it is evident that in the recent years, the private producers have been supplying the overwhelming majority of the sanitary latrines in the rural areas. Table 5.6 provides sources of supply of latrines and their components.

Table 5.6 : Sources of Supply of Low-cost Sanitary Latrines

	(%)
Public Sector production centres	11
Private Producers/ Sellers	60
NGO run production centres	13
Home-made	16
	100

From a comparative picture as appears at Table 5.7 makes it evident that the private producers of latrines would be the obvious choice as supply source. These are more readily available with better quality.

Table 5.7 : Reasons for Selection of Supply Source

Reasons for selection	**Public-Sector production centre (%)**	**Private Producers (%)**	**NGO production centre (%)**
Easy availability	34	49	28
Cheap	24	6	14
Better quality	32	29	29
More options to select	0	2	1
Better service	2	3	6
No alternative source	8	9	3
Installment payment	0	2	19
Credit sale	0	0	0
	100	100	100

That private producers of latrines/ latrine components are preferred which can be seen from Table 5.8. Because private producers sale from ready stock. Over 92% of the respondents to latrine census reported that they received supply from private producers within maximum of 4 days while the same is true for Public Sector production centre for 71% of the cases. The figures of Public Sector production centre cannot be attributed for its service delivery system. This becomes evident if one considers that total supply of sanitary latrines by Public Sector production centre is only around 13%. What may have happened is that due to availability of stock in Public Sector production centre, time taken for delivery could be decreased significantly.

Table 5.8 : Time Taken for Supply of Sanitary Latrine Components

Source of supply	**Public-Sector production centre (%)**	**Private Producers (%)**	**NGO production centre (%)**
No time required	27	33	17
1 – 2 days	35	42	36
2 – 4 days	9	17	18
4 – 7 days	6	2	9
> 7 days	23	6	20
	100	100	100

A positive aspect that appears well for rural sanitation is that more and more households are investing their own capital for purchase of sanitary latrines. As many as 87% respondents indicated that they paid from their own funds for purchase of latrines. This may be because more and more people are appreciating the use of sanitary latrines. This may be the result of the massive Public Sector investment of the last decade in the form of Social Mobilization, hygiene education etc. being supported by NGOs. Table 5.9 provides information on the source of fund for purchase of sanitary latrine component.

Table 5.9 : Source of fund for purchase of sanitary latrines

Source of fund	(%)
Own fund	91
Loan from supplier	1
Subsidized by Government	5
Loan from Bank	1
Others	2
	100

5.4.4.2 Responses from Private Producers of Low Cost Sanitary Latrine Components

Data collected on the various aspects of low cost sanitary latrine manufacturers indicates that about 63% have set up production centres within last five years. It indicates that during the last 5 years there has been increase in the number of low cost sanitary latrine manufacturing enterprises. Of these producers about 94% were from the private sector and the rest from NGO. Table 5.10 gives analysis in details on the age of establishment while Table 5.11 gives information of the category of producers.

Table 5.10 : Age of establishment of sanitary latrines production centre

Years	(%)
1 – 2 Years	50
2 – 4 Years	6
4 – 5 Years	6
5 – 10 Years	13
10 – 15 Years	13
15 – 20 Years	6
20 – 25 Years	6
	100

Table 5.11 : Type of Producer

	(%)
Private Producer	94
NGO run production centre	6
	100

Table 5.12 shows that among the Private Producers around 65% had investment of Tk. 100,000 or less while only about 30% had invested over Tk. 100,000 or more. In 25% instances the investment figure is less than Tk. 20,000 only. This observation indicates that low cost sanitary latrines

manufacturing is an industry that could be started with very little capital. Thus, it could from a very viable endeavor for income generation activities.

As can be seen from Table 5.13 nearly 70% of the private producers ran the business with self funding. NGOs provided loan for about 19% of the producers, while some were given monetary support by their relatives and friends (11%). This shows that because of the scale/size of investment many small entrepreneurs are interested to invest in this trade.

Table 5.12: Amount invested for setting up Sanitary Production Unit

Amount (Tk.)	(%)
5,000 – 10,000	6
10,000 – 15,000	-
15,000 – 20,000	19
20,000 – 25,000	6
25,000 – 30,000	-
30,000 – 40,000	13
40,000 – 50,000	13
50,000 – 100,000	6
100,000 – 200,000	25
200,000 – 300,000	6
> 300,000	6
	100

Table 5.13: Source of fund of Private Producers

Source	(%)
Own fund	70
NGO support	19
Friends/Relatives/Others	11
	100

Furthermore the margin of profit is also sufficiently high to motivate small private investors. That apart technology being simple and demand for products being high, it may be worthwhile for the NGOs to motivate their group members to take it up as income generation activity.

A wide range of product attracts varieties of customers from the private production centres. Apart from common product of sanitary components these production centres produce rings, plain slab with a hole, concrete slab with pan, slab with water seal, pan with water seal, mossaic pan, pipe & fittings of sanitary latrine, big size pipe, RCC piller, tob, ventilator, small piller etc. Ready availability of low cost sanitary latrine component is also a common scene at private production centre.

As regards price fixation, the majority of the private producers used the techniques of cost plus pricing i.e first identifying all costs for each unit of product and then adding a pre-determined profit margin. About 33% of the producers used market pricing i.e., what the going rate in the market is.

Table 5.14 shows that the major clients of these private producers are individual buyers, NGOs and private institutions.

Table 5.14 : Major Clients of Private Producers by Type

Type of client	(%)
Private institution	19
NGO	13
Individual	49
Retailer	19
Others	-
	100

About 75% have received training in the manufacturing of Low Cost Sanitary Latrine. It is thus expected that the products produced by these producers would meet certain minimum standard. Of these trained, 58% have received training from Public Sector agency. Table 5.15 and 5.16 gives details about training.

Table 5.15 : Technical Training Received

	(%)
Training received	75
No training	25
	100

Table 5.16 : Source of Training

	(%)
NGO	25
Public sector agency	64
On-the-job training / privately	11
	100

Table 5.17 shows the competitive nature of the market. For each of the private production centre there seems to be two to seven competitors. Competition only benefits the customers in the form of better quality product at optimum cost. It may be said that the users of low cost sanitary latrines are being benefited by the competitive environment of the industry.

Table 5.17 : Number of Competitors

Number of production centres	(%)
Less than 2	13
2 - 4	69
5 - 7	13
> 7	6
	100

Different kinds of products being produced by the different producers of low cost sanitary latrine/ latrine component manufacturers. It is the strength of product mix that has allowed the private producers of low cost sanitary latrines/ latrine components against the subsidized products of Public Sector production centres who only produce sanitary latrines and components. In fact for most of the private producers sales proceeds from other products account for between 30% and 70% of their total sales.

The major services provided by the private producers is shown in Table 5.18. In order to promote sales, the producers also provide the end users with some other facilities which are presented in Table 5.19.

Table 5.18 : Services Provided by the Private Producers

Services provided	(%)
Transport	31
Installation	38
Relocation of site	19
Construction of superstructure	6

Table 5.19 : Facilities provided by private producers to promote business

	(%)
Loan facilities	31
Discount facilities	56
Servicing facilities	31

As evident from Table 5.20 amongst the major problems faced by the private producers of low cost sanitary latrines/ latrine components, the fluctuation of demand for product varies significantly as does shortage of funds and transportation problem. However, the producers are very optimistic about the future of their business and this is evident from Table 5.21.

Table 5.20 : Problems Faced by the Private Producers

Problem	(%)
Limited buyer	38
Shortage of fund	25
Credit sale	6
Transportation problem	12
Dice problem	6
Others	6

Table 5.21 : Future Prospect of their Business

	(%)
Future prospect is good	44
Future is bright	13
Not good	6
This business will be continued	19

5.4.5 Analysis and Interpretation

Installation and/or use of low cost sanitary latrines have increased significantly in the recent years. The study observed that most (about 60%) of the sanitary latrines have been installed within last 5 years. The perception of the study is that there is a linkage between social mobilization and sanitation promotional activities initiated from early 90's.

In the recent years, the private producers have been supplying majority of the sanitary latrine components in the rural areas. The study revealed that over 60% of sanitary latrine components were from private producers. More and more households (about 88%) are spending their own resources for purchase and installation of sanitary latrines. Although the pace of sanitation coverage is still slow no significant adverse effect was revealed because of gradual phase out of subsidy on latrine components of public sector production centre. However, there were complaints from private entrepreneurs.

Apart from demand for sanitary latrine components which has been generated for a number of reasons the low capital cost required for establishing a production centre is a contributory factor for the growth of private producers.The study assessed that amongst the private producers of sanitary latrine components, around 65% had investment of Tk. 100,000 or less while about 35% had invested over Tk. 100,000. It is interesting to observe that about 20% private producers were reported to have invested between Tk. 15,001 – 20,000 only. This observation indicates that low cost sanitary latrines manufacturing is an industry which could be started with a very little capital.

Because of the low investment requirement many small entrepreneurs are interested to establish sanitation production centres and be involved in this trade.Nearly 70% of the private producers ran the business with self financing. The margin of profit is also sufficiently high to motivate small private investors. Apart from low investment cost and high profit margin, technology being simple and demand for products being there private entrepreneurs are therefore attracted to this business.

As regards price fixation, about 67% of the private producer used the techniques of cost plus pricing i.e., first identifying all costs for each unit of product and then adding a pre-determined profit margin. The other 33% were found to follow market pricing i.e., what the going rate in the market is.

Need for basic training and skill development was evident from the study. About 75% of the private producers have received training in the production technique of low cost sanitary latrine components. Of these who received training about 60% were from public sector agency.

In many places a competition in the business was reported. For each of the producers there seem to be 2 to 7 competitors i.e., other producers within its envisaged command area. Competition only benefits the customers in the form of better quality product at optimum cost.

An unique observation of the study was that of product mix of private production centres. As opposed to public sector production centres which produces only sanitary latrine components following only one standard design, the private sector production centres produce a number of other products along with sanitary latrine components. It is the strength of product mix that has supported the private producers of low cost sanitary latrine components against the subsidized products of public sector agency's production centres.

Most of the private producers' sales proceeds from other products account for between 30% and 70% of their total sales.

Social status and value addition to the household, have also had a role in promoting the access and use of sanitary latrines. The study observes that while the demand for sanitary latrines in the rural areas have increased for health awareness created by social mobilization, primary health care promotion etc., the perceived need for privacy, particularly of female members of the household was important.

Although sanitation projects in a limited scale were in the public sector development programmes since 60's, importance of sanitation was realized only from early 80's. Even then the investments of resources in sanitation in no way comparable with that in water supply. The investment trend continues in a rather similar fashion even in 90's. However, importance of sanitation, health & hygiene has earned greater recognition in the sector from early 90's. This scenario of public sector profile seems to have a direct influence on the development nature of the private sector in wss with time lags.

A comparative picture can be viewed from the numbers of public and private production centres of sanitary latrine components. In late 70's there were about 400 sanitation production centres from public sector with virtually none from the private sector. In late 80's the number of public sector production centres increased to about 1000 and to a great extent these production centres were evenly spreaded throughout the country. Though limited, sanitation promotional activities started from early 80's through public sector programmes. Private sanitation production centres started appearing from early 80's. From historical evidence in late 80's the growth of private production centres was to an extent of about 70% that of the public sanitation centres i.e., private-public ratio was 0.7 : 1. In early 90's proliferation in the growth of private production centres increased the numbers that surpassed the public sector production centres. In mid 90's the private-public ratio was something near to 2.5 : 1, meaning that there were about 2500 private production centres in the country against about 930 public production centres (about 70 production centres were closed). In 2002 preliminary assessment indicates that the ratio is about 5 :1.

As regard sanitation, in terms of time frame the threshold line of private-sector surpassing the public-sector appeared in a way after about 20 years of putting efforts. But precisely to say, a sharp response was visible within five years of sanitation promotional activities when the private sector surpassed the public sector in around 1990. Proliferation of growth since early 90's seems to have a direct relation with the nationwide Social Mobilization for Sanitation Project, popularly known as SocMob Project. However, this is an overall national picture with all limitations of geographical, hydrogeological, and socio-economic variations. The study observed that most of the private sanitation production centres are located in and around thana sadars[7] and in big growth centres with well connected road networks.

Public sector investments in sanitation through promotional activities and addressing software components since early 90's significantly contributed towards growth of private sector in this area. In terms of hard ware investments and considering water seal latrines as sanitary means in rural areas in general the threshold level 1:1 was attained around 1990 with an access coverage of about 6% only.

The study also perceived that the rural households who could afford this kind of latrines took it as a status symbol and also for the privacy and convenience, particularly of the female members of the family. A demand from this segment increased significantly which also facilitated the growth of private sector.

Another significant observation is that the private manufacturers produce a range of products (components of sanitary latrines) for the customers to choose from. In contrast public production centres follow only one kind of design.

From the study it is evident that one can start the business with as little as Tk. 10,000 seed money.

[7] Thana sadar stands for Upazila proper

The study observation is that further increase in the participation of private sector in sanitation is not going to be an easy job. The remote areas with poor infrastructure facilities coupled with a set of complex socio-economic and cultural factors have significant impact on the degree of demand for sanitation. The task of bringing behavioral changes in people for 'health and hygiene', and sanitary practice of defecation involves a complex process. This kind of task, entailed within the term 'Software-intervention' is important towards a greater participation of private sector.

The study observes that creation of demand is a precondition for increasing sale of sanitary latrines. As has been evident from the experience of No. 6 pumps, private sector will gradually get involved when there is demand to an extent that makes their efforts viable. This calls for continuous social mobilization for sanitation activities.

The study observation is that motivating people and building awareness to use sanitary latrine and for health and hygiene will require social mobilization and community involvement to the extent, which is beyond the institutional capability of sector agency. The use of sanitary latrines has a direct relation to expressed demand and priorities of the households. It should not be thrust upon them. Past experiences indicate that access to sanitary latrines does not necessarily guarantee its use. In the past some latrines particularly in areas where the provision has been forced or linked to another services which consumer wanted – has fallen into disuse. Intensive social mobilization and promotional activities are thus assessed as a very important task that eventually will activate private sector participation.

The study observed that one of the reasons for non-use of sanitary latrines even when a member of the household has access is the physical feelings of being suffocated within a confined room. This phenomenon can be attributed to design deficiency in superstructure that calls for further R&D and action research.

5.4.6 Factors influencing Private Sector Participation

5.4.6.1 Factors that have promoted Private-Sector participation & its growth

- Demonstration effect of Public Programmes
- Soc-Mob; Health & Hygiene Education; Communication
- Activities of CBOs, NGOs
- Cheap; Simple technology
- Efficient service delivery
- A range of service offered by Private-Sector
- A mix of products
- On-the-job Training
- Reliable services
- Training of Public-Sector
- Low investment in Sanitation business
- Credit facility to known customers

5.4.6.2 Factors that have inhibited Private Sector participation & its growth

- The continuing presence of Public-Sector
- Less incentive on SocMob/ Communication
- Attitude towards behavioral change
- Limited access to source of capital funds
- Less incentive on Training
- Limited demand and seasonal fluctuations
- Limited access to credit
- Standards & Quality Assurance
- Subsidy of Public-Sector
- Centralized decision making
- Expensive technology
- Complex/difficult technology

5.4.7 Conclusions

Initiation of rural sanitation programme and its demonstration led by the public-sector agency has helped sanitation establish as a distinct sub-sector among many sectors in the development arena of the country. Since then, a commendable role has been played by the public-sector to bring about development in the sector.

Resources were limited and there has always been a competition among the development sectors for investment outlays. In a virtual absence of rural sanitation in the country it was the public-sector that solely took all the risks of investments in the sector during earlier decades after the independence of the country in 1971. Limited resources and procedural framework of public-sector are the limiting factors for taking absolute responsibility of the sector development.

The study experienced that the private-sector has responded well to the demand generated in rural sanitation primarily through the demonstration effect of the public-sector programme. Today a vibrant private-sector is contributing significantly in the development of sanitation in Bangladesh.

A lot more to be done for a sustainable and full scale development of sanitation in the country. This aspiration can be translated into reality only when the private-sector is in a position to play a greater role and participate more actively.

Lessons from the past will obviously influence the future projects to respond to user demands and the private-sector needs. Lessons from private-sector involvement in sanitation will thus add a new and important dimension to future sanitation projects in Bangladesh and in other regions of similar socioeconomic context.

The factors and dynamics of the growth of the private-sector perceived by the study will enable future programmes in creating an enabling environment for private-sector to flourish and play a greater role in RWSS.

A policy framework structured on factors that influence private sector participation is a prerequisite to facilitate its greater involvement in sanitation services.

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Thematic Discussion on Supply and Demand

The following points were raised in the discussions after the presentations on supply and demand:

- Community Led Total Sanitation (CLTS) was a strategy that had proved to be effective by penetrating remote areas, creating new demands and reducing the costs of latrines.
- Quality of latrines produced as a whole in the country was poor and this was definitely affecting client-satisfaction (example of Goose-necked latrines given).
- Business in the sanitation sector is of a seasonal nature, and is therefore less profitable.
- Limitations in public sector investments in sanitation have aided private sector growth in the field.
- Public sector activities can work as a base for training the private sector and thus bring about improvements.
- Household needs/demands are a major impetus for the development and promotion of sanitation in the community. This in turn will lead to the development of private sector involvement in the area.
- Incentives for efficient work can increase significantly the role of the private sector in sanitation.
- Hygiene education is still very necessary as a precursor to the production of toilets and introduction of sanitation promotion programs.

Thematic Group 3 **: Institutional Support**

5.5 Institutional Support in Sanitation Promotion

Dr. Bindeshwar Pathak,
Director, Sulabh International

As a major non-governmental organization in the field of environmental sanitation in India with a credible track record of having made significant and acknowledged contribution in pioneering affordable sanitation technology and in the providing a nation-wide network of public conveniences, Sulabh International Social Service organization wants to place on record its appreciation and commendation of the endeavour of the Bangladesh Government in convening the South Asian Conference on Sanitation in collaboration with international stakeholders e.g. UNICEF, WSSCC, WSP, WHO, World Bank, DANIDA, DFID, ADB, UNDP and Water Aid.

The present Conference assumes significance in the backdrop of the slow pace and progress of sanitation and hygiene related work in South Asia, especially in view of the fact that the region has plethora of problems pertaining to political will, good policy framework, carefully crafted implementation strategies and required inflow of financial, technical, institutional and administrative support. In view of the massive challenges that the countries in the region face in respect of sanitation, the objectives of the Conferences are laudable in as much as they intend to translate intentions into action, and action into results.

A holistic strategy for sanitation promotion is therefore necessary and where the following needs to be done by way of paying greater attention to reaching the hard-to reach groups; increased emphasis on development and promotion of appropriate and indigenous technologies; sustained efforts to create an environment in which demand for sanitation can grow, and which in turn, can strengthen political will; building of strong partnerships with private providers; involving NGOs in increasing the role of civil society organizations in providing sanitation services ; enlarging the availability of public toilets; augmenting financing; improving the management of public toilets; creating a cadre of trained sanitation workers; promoting alternative human waste disposal systems; formulating national policy on sanitation and mounting public education campaigns.

For this to happen there has to be synergy in the efforts of Government, local bodies, NGOs and the public, the four major stakeholders in sanitation sector and which can help build and boost up institutional bases of support for sanitation promotion. Further the NGOs can play a very crucial and critically important role as providers/promoters of sanitation by being catalytic agents between relevant government organizations, local bodies and the public by performing the role of synthesizers, enablers and providers of facilities/services and disseminators and facilitators of information, education, communication and motivation.

I should like to dwell upon the efforts of Sulabh to address the problems faced in the matter of institutional support in sanitation promotion. Everyone in my country was aware that toilet facilities were and continue to be woefully inadequate. One of the biggest barrier was absence of suitable technology. Sulabh as an NGO founded by me though was aware of the need of promoting sanitation practices with a view to eliminating open-defecation . To me it also meant that it will be a practical step towards abolishing scavenging by a class of people engaged in the demeaning

practice and task of manually cleaning and carrying excreta of others. They were the "untouchables" and after independence are known as scavengers. The technology that I devised as a solution was of twin-pit pour-flush toilet system which obviates the necessity of manual cleaning of excreta. It also resulted, to a considerable degree, in social transformation of the status of the scavengers.

Considering that in India nearly 700 million people do not have toilet facility the task of providing it on such a gigantic scale meant creating awareness on a massive scale; engaging a large number of persons to implement the technology; to persuade the Govt. and local bodies to take up suitable programmes and converting a small effort into a movement. I am happy to inform that we have been able to achieve all this in a large measure. Moved by the plight of the scavengers, necessitating devising a technology leading to social reform has been an achievement of which I am proud.

For Sulabh, it has not been easy to hold together a large number of volunteers doing the work and to carry on the mission without government's financial support. Where community toilets were involved the problem was met by adopting pay and use system. This has led to 6000 community toilets coming up, working successfully. In the matter of individual household toilets the financial aspect was taken care of by the local bodies and beneficiaries themselves. More than a million household toilets have been constructed by Sulabh. Individual households and community toilets put together are used by more than ten million people everyday. Construction of a million household toilets is a classic example of construction work and management practice, in promotion of sanitation through institutional (Sulabh's) support. The beneficiary is personally involved ensuring that he gets a useful facility. His contribution lies in repaying the loan and where the cost exceeds the loan amount, in pitching in his own money. What started as a trickle viz. two toilets in the town of Arrah back in 1973 became a mighty river, almost an ocean, running into million of toilets. Infact, it forced the Government to pay greater attention to the need for toilets. The demand itself became an advocacy with the government by the people and for the people (that is themselves).

An extremely important requirement in popularizing household toilets in our region is institutionalizing the financing of sanitation programs. Though people are willing to pay, it becomes difficult for them to make single one-off investment. To meet the situation the alternatives are subsidy, loan and self help. Of the three, the crutch of subsidy has to be ruled out. The question arises whether one can do without subsidy. The answer is in the affirmative. Our host country Bangladesh is a shining example where in some cases subsidy has been eliminated and has been substituted by self-help which in turn has been the result of creation of awareness and education.

As stated awareness, education and follow up in implementation of any program is of great importance. Sulabh, through publicity, utilizing print media, contacting prospective beneficiaries helping them secure loans from the local bodies, providing technical help in construction, providing guarantees for cost free repair for a certain period of time was able to popularize household toilets. Training was undertaken on a massive scale. Result has been Sulabh is today spread over nearly 450 districts and 1100 towns of our country. In fact, Sulabh has become a synonym for a toilet facility. I say all this not only with a view to recount our achievements but, also to emphasise the role of institutional support in sanitation promotion.

We have not confined ourselves to the field of solving problems of human waste management. But have also done work relating to waste water recycling and implementing biogas technology, I was able to do so after a lot of effort and experimentation. We have been able to develop technology

where community toilet waste water is converted to colourless, odourless and pathogen free water, usable for agriculture and horticulture purposes and fit to be discharged into any water body.
Thus it will be seen that technology has been combined with social reform, financial viability and research. I still would like to ask you – which element is missing? Can you guess? Perhaps, not. The answer is – faith. As I have said, to me Sulabh is a mission, a faith and a religion. Without these it would not have been possible for technology or for that matter, the desire to bring social transformation to be converted to achievement.

5.6 Gender Issues in Bangladesh Sanitation Programmes

Suzanne Hanchett and Begum Shamsun Nahar

5.6.1 Introduction

"Sanitation" needs a broad definition, rather than a narrow one, as many now know. It is more than simply *having* a suitable latrine; it also means that all people are *using* it. It is essential that it be used and maintained properly, or its public health purpose is defeated. Waste must be confined and safely disposed of, if the facility is cleaned. Drainage patterns affect the environment directly. Sanitation issues are closely associated with other practices, especially post-defecation hand-washing with soap, and probably also other aspects of personal hygiene, such as bathing, clothes washing, methods of cleaning utensils. There are many examples of both good and bad practice in Bangladesh, where sanitation has received concentrated attention from numerous agencies, public and private for more than 20 years now.

When thinking about the social factors affecting latrine use and other sanitation practices, it is impossible to avoid gender considerations. Ways that women's work differs from men's; and different degrees of value assigned to women's and men's interests; and the opportunities and obstacles facing either men or women – these and other gender issues come into play when we think about sanitation in Bangladesh.

Sanitation is a household matter, of course, but it also is a quintessentially public issue as well, since people's defecation habits affect the health of many others. Unlike water use, sanitation practice needs to be 100%, if it is to have a positive public health effect. There also is the matter of public latrines, installed by governmental agencies at bus stands or in schools: gender issues are found in this aspect of sanitation as well.

According to the Bangladesh Bureau of Statistics (*1998 Statistical Yearbook)* in 1994 approximately 63% of urban households and 15% of rural households had some kind of sanitary latrine facilities. There has been a significant increase since 1980, when only 21% of urban households and 1% of rural households had sanitary latrines (*Environment Management*, by A.K. Monowar Talukder. Dhaka: LGED, 2002).

We would like to discuss the gender aspect of sanitation in terms of: (1) use and maintenance of sanitary latrines; (2) sanitation and social status/hierarchy; (3) the need for safe and separate facilities – public or private; and (4) sanitation, pollution, and health.

5.6.2 Use and Maintenance of Latrines

Any professional doing hygiene education or promoting sanitary latrine use knows that people often have difficulty learning how to use and maintain their facilities. Despite extensive public education campaigns, the public's awareness level and general habits are still at too low a level to prevent spread of diseases associated with poor sanitation practices, many of which affect children.

It is unfortunately common to see evidence of this lack. People install latrines but do not use them. People break the middle ring and allow contents to flow out into a nearby ditch. People break the water-seal. Or they let the contents overflow. These are commonplace occurrences in Bangladesh rural and urban areas. Avoiding such problems requires significant follow-up attention from those promoting sanitary latrine use.

At the household level convenience makes it simpler for people to observe good sanitation practice and associated hygiene practices – if they are aware of the need to do so. Maintenance of facilities is closely associated with social patterns: especially the household division of labor. Women's and men's time use habits are key to this issue; both have been found to take the household responsibility in various parts of the country. This is especially important in the large percentage of households (more than half) who cannot afford to hire paid cleaners to do the job.

The condition of public latrines is more often than not very much worse than that of private latrines. It seems that "everyone's property" is actually "no one's property." Missing doors, piles of feces, over-flowing pans – all are visible reminders. Hired caretakers can solve the problems, but resources are not always dedicated to such services.

5.6.3 Sanitation and Social Hierarchy

In many parts of Bangladesh that have been covered by sanitation promotion programs, nice latrines serve as status symbols as well as environmental health measures. We have found sanitary latrines among lists of items provided as dowry during marriages. One poor woman met in Gopalganj District was saving money from her meager income to install a new latrine before trying to arrange a marriage for her daughter. She felt that the family reputation, poor as they were, would be enhanced by the presence of the new latrine, making a good match possible. The experience of VERC, conducting sanitation promotion in several rural areas has demonstrated that elite families take considerable pride in raising sanitary latrine use to "100%" in their villages. One wealthy household gave a latrine to a poor household, explaining that to do so increased their family honor. Status concerns are, of course, important to both men and women.

Status or hierarchy can work in a negative manner, if the elite is not engaged. In a few locations we have observed a high status household refusing to install a sanitary latrine even after all others had done so. They did not want to lose status by being "followers" instead of "leaders."

Some men in VERC/WaterAid villages have developed careers as "local sanitation engineers," who build simple latrine models for their neighbors. This is a new sort of honor for poorer men – as well as an income-earning opportunity.

5.6.4 The Need for Safe and Separate Latrines

Women need separate facilities at public places, especially bus stands or train stations; also markets. Normal DPHE practice is to allocate one stall for women's use and several for men's use. But women need them more than men do because of their greater need for privacy during elimination. In a society, such as Bangladesh, in which many women are expected to maintain *purdah* (seclusion, or not being seen by unrelated men), privacy of latrines is all-important. This becomes especially difficult and painful when women are living in public during floods. Sanitation needs to be part of "flood-proofing" and disaster management. Cyclone shelters should be equipped with private latrines but do not always have them.

In schools there also is a need for attention to girls' special needs. All too often one finds (a) the best school latrines are reserved for teachers, rather than students; and (b) the second-best are reserved for boys' rather than girls' use. In some cases girls are expected to use private homes, as their mothers often do. UNICEF programs are working on these and related issues at present.

Security and safety of women is closely related to latrine use. Often acid-throwing or rape attacks occur when women are going out at night to use latrines at a distance from their homes.

5.6.5 Health-related Sanitation Issues

There are three critical, health-related gender issues in relation to sanitation. One is the greater impact of poor sanitation on women. As poor sanitation often causes pollution of water sources and associated disease, women's work increases. For they are the primary care-givers of sick family members.

A second issue has to do with menstrual hygiene. Since menstruation is such a personal and private matter – a virtually taboo subject – women are very secretive about cleaning the cloths they use to catch menstrual flow. Often this means keeping the cloths inside, where they do not dry properly, so that men will never see them. This practice could encourage bacterial growth and possibly cause reproductive health problems; but no one has studied the subject in detail, to our knowledge. (Shireen Akhter has done some preliminary field interviews on this subject in connection with the WaterAid-Bangladesh Hygiene Promotion Evaluation, 2002)

The subject of menstruation leads to a third gender-related issue. As men are typically unwilling to be exposed to menstrual blood, some are unwilling to use the same latrines used by women. So they may defecate outside. If their financial position allows it, families in some areas (especially the southeast) construct two household latrines, one for men's use and another for women's use. In such cases the likelihood of men getting the best facilities is very high. In fact, women may be using *kacca* types of facilities, though hidden from public view. The men-only facilities often are *pucca* (cement-built) structures positioned proudly at the entrance to the homstead.

Old cultural notions of 'purity' and 'pollution' greatly influence acceptance of sanitary latrines in South Asia. Fecal matter is considered polluting by all; so latrines are inherently 'polluting'. Menstrual pollution is equally feared, but rarely discussed in open forums. It also affects defecation patterns, as the above examples show.

5.6.6 Different Defecation Patterns

Generally men and women have very different defecation habits, because of these various public and private considerations. Because of their greater need for privacy, it is possible that women's habits are less likely to pose health hazards than men's. Men can defecate or urinate openly, but this is almost unheard of among women, who seek privacy and often find their way to a sanitary latrine one way or another. However, promoting awareness among men is far more difficult than communicating with women. Men are harder to reach, and they move around more than women do. As the CARE-SAFER team found in Chittagong and Cox's Bazar, men were interested in discussing sanitation, but one rarely found the same group in the same market area week after week.

5.6.7 Proposed Themes/Points for Discussion

1. How can sanitation programs reach men?
2. What methods work best to persuade elite groups in rural areas?
3. How can public agencies, such as Dhaka City Corporation, be made more accountable for maintenance of public latrines they install in slums?
4. Can/Should DPHE expand its approach to sanitary latrines, allowing for transitional types to encourage sanitary latrine practices, rather than maintaining its steadfast commitment to the water-seal, ring-slab system?

Thematic Discussion on Institutional Support

There were a number of unifying themes across the two presentations and in the subsequent discussions. These were:

1) Role of NGOs, Governments and Communities: General agreement that NGOs have a key role to play as facilitators and catalysts between Communities and Governments, particularly given NGO skills in social marketing. However, it is also important to recognize the important role of Government in policy setting and encouraging long-term sustainability of programme delivery. Accountability of public organizations involved in sanitation programmes and motivation of elites to carry forward the movement for total sanitation therefore needs to be ensured.
2) Financing of Sanitation: There was again general agreement that Government subsidy alone was unlikely to ever be sufficient to achieve full coverage. Dr. Pathak's presentation highlighted strongly the argument for a self-financing approach, using credit and the need for large-scale institutional credit to support the sector. Most participants were in agreement about the role of credit but there were deliberations about whether elements of subsidy were still needed to support credit for the poorest-of-the-poor.
3) Hygiene Promotion: There was widespread agreement that the sector should take steps beyond the building of latrine (traditional, target-oriented approaches not effective) to encourage promotion. Delivery has to take account of different gender needs and different levels of awareness and willingness to change. Approaches leading to outcomes rather than targets and fixed timescales are needed. This means many institutions will have to reexamine the way they work and who they employ to do sanitation.
4) Overspecialized Sanitation: There was an argument put forward that sanitation had become overspecialized. Responsibility should not therefore rest only with engineers but also with education and health sector professionals.

There were also a number of other questions and observations that were left unanswered:

- Why not promote ecological sanitation (ecosanitation, biogas, etc.) as an economic resource for sustainability?
- What role different institutions can play for improving the lives of the poor people?
- How to reach the disadvantaged group by withdrawing subsidy and grant?
- How community latrines could be maintained once they are constructed?

Thematic Group 4 **: Strategies to reach the poorest of the poor**

5.7 Experiences from WaterAid's Work in the South Asia Region

Lena Choudary-Salter
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5.7.1 Introduction

This paper discusses some of the experiences of WaterAid and its partner organizations working with the poorest of the poor to increase their access to sanitation in four countries in the South Asia region, namely, Bangladesh, India, Nepal and Pakistan. The combined estimated population of these four countries is 1.3 billion people of which 831m (64%) are estimated to live without access to sanitation[8].

5.7.2 Government Strategies to Reach the Poorest of the Poor with Sanitation

A brief review of some of the strategies being adopted by government's in the region to ensure that sanitation facilities reach the poorest of the poor indicates that the following approaches are being used.

5.7.2.1 Priority to vulnerable groups

Government sanitation strategies prioritize the needs of vulnerable groups, including women, scheduled castes and tribes, landless people and people living in the most densely populated settlements in urban areas.

5.7.2.2 Decentralization of responsibility for sanitation programs to local government

Governments are encouraging local governments to play a greater role in the provision of sanitation, in particular in enhancing the access of poor communities to finance and in allocating subsidies.

5.7.2.3 Targeted subsidies

Subsidies are provided to poor households in the form of free latrine sets. Poor households are identified on the basis of preset criteria (for example size of land holding, annual income, type of work) or on the basis of participatory community wealth ranking.

5.7.2.4 Financing

Governments are exploring innovative financial mechanisms to use and leverage the limited funds available to achieve the objective of total sanitation (for example revolving loans for sanitation).

5.7.2.5 Role of Community Based Organizations (CBOs)

[8] Source - http://www.wateraid.org.uk

Increasing recognition is being given to CBOs, allowing them to contract sanitation works.

5.7.3 Analysis of the Reasons that Orevent the Poorest of the Poor from Accessing Sanitation

The poor are unable to access sanitation due to a combination of financial, technical, social and governance related factors.

5.7.3.1 Financial

Poor communities face difficulties in making a single one-off investment to build a latrine and in borrowing and managing funds, procuring goods and services and, above all, making timely repayments. In many areas credit facilities for sanitation and not available.

5.7.3.2 Technical

There is a lack of comfortable and sustainable affordable low cost latrine options.

5.7.3.3 Social

Poor and disadvantaged groups are often excluded from participating in decision making processes and do not benefit from projects.

5.7.3.4 Governance

The demand methodologies followed by governments do not always include appropriate people-friendly and participatory methodologies and the monitoring systems and delivery channels at grass-roots level are very bureaucratic.

Pro-poor subsidies often fail to reach their intended targets. Consultations with villagers reveal that local people consider that pro-poor subsidies will never reach the poor under the prevailing procedures and villagers were found to favour cost recovery in instalments or micro-credit for sanitation services.

5.7.4 Strategies Adopted by WaterAid and Partners to Reach the Poorest of the Poor

5.7.4.1 India

Participatory wealth ranking to determine eligibility for subsidy and credit
Programmes begin with a participatory wealth ranking exercise which identifies the poorest of the poor and helps people to decide who deserves external aid (from WaterAid). WaterAid support comes in the form of subsidy and/or credit and the level of support is based on the poverty of the household. This exercise enables the projects to decide on a variable level of subsidy and credit.

Innovative financing mechanisms
Alternative financing mechanisms have been developed which open the way for people to invest in sanitation and promote savings for sanitation. Opening of credit for sanitation by thrift groups and by financial institutions enables the poor to adopt sanitation.

Affordable technologies
Low-cost options and simple technologies which make use of locally available materials and reduce costs are promoted. These simple options enable the participation of poor people. For example low cost brick making is promoted which enables households to participate in production by making use of locally available sand, mud and simple moulds. This approach has been successful in encouraging many poorer households to adopt sanitation.

Use of local skills and resources
Sanitation approaches make use of local skills and resources. The local community are trained as masons and production centres are established and managed by local people. Stocking and distribution are managed by CBOs to provide the benefits of bulk supply and reduce the cost of overheads.

Sanitation promotion by the poor
The local community, especially the members of poorer households, are trained as sanitation promoters. Giving this responsibility to the poor and encouraging them to commit to the role motivates them to adopt sanitation. The incentive provided for the work they do helps them to meet the cost of constructing a latrine.

Monitoring
Participatory assessments monitor the progress of the situation in poorer households and the role of the poor in promoting sanitation. Tools used in the assessments include social maps showing households with latrines, usage studies and analysis of loans taken and repaid.

5.7.4.2 Bangladesh

No subsidy community empowerment approach
WaterAid and partners have been following a no subsidy community empowerment approach to achieve total sanitation in communities. Partners implement water supply and sanitation programs following participatory and demand responsive policies. After creation of awareness on the health benefits of sanitation and stimulation of demand through CBOs, community people identify the poorest of the poor in their community and help them to solve their sanitation problems. Experience shows that relatively well off families support (in cash and in kind) the poorest families in their community to construct latrine. Very low cost latrine options are demonstrated and communities are encouraged to innovate with latrine designs to make use of locally available materials and reduce costs even further. Sometimes link-up is established with local government to receive their support for the poorest in the community. Once poor people become habituated to using sanitation facilities, they usually manage resources for construction and repair of their own sanitation facilities themselves. Throughout this process partner NGOs act as a facilitator and CBOs implement all relevant activities from planning to implementation and monitor their activities through participatory processes.

5.7.4.3 Nepal

The Gender and Poverty approach adopted by WaterAid's partner Nepal Water for Health (NEWAH) recognizes that without specific targeted interventions poor women and men often do not benefit from sanitation programs. NEWAH has developed the following strategies to ensure that all socio-economic groups have equal opportunity to actively participate at every stage of the project.

Confidence Building of Women and Socially Excluded Groups to Participate in Projects
Strategies have been devised to enable women and disadvantaged groups to achieve equal access to project information, training and paid job opportunities. This involves many informal meetings and discussions, such as negotiating with the richer/elite groups of men and women and encouraging women and the poor men to attend meetings and to voice their opinions.

Identifying the Poor
Using a well-being ranking exercise, communities themselves decide the criteria for each socio-economic group and rank each household. Criteria include size of land holding, food sufficiency, employment/income, indebtedness and disability. The results of the exercise are presented in a mass community meeting and debated until a consensus is reached.

Free Latrine Components to the Poorest Households
NEWAH provides the poorest households, identified through participatory well-being ranking, with free latrine components up to the ground level.

Priority for project paid jobs and training to women and poor men
The GAP approach places emphasis on giving priority for paid job (for example sanitation masons) opportunities to women and men from poor households. This prevents the elites in the community from monopolizing the paid jobs and training opportunities. It also enables women to swiftly respond to breakdowns that immediately affect them, especially in the absence of men, who are increasingly migrating away from villages in search of employment or to escape the insurgency.

Health & Hygiene Education for All
The poorest are often most affected by health problems exacerbated by poverty and a lack of awareness. If every member of every family has access to increased health and sanitation knowledge resulting in changed hygiene and sanitation practice, the positive impacts on health will be greater. NEWAH believes that health and hygiene are the responsibility of both men and women, and have trained male community health volunteers to persuade more men to attend health, hygiene and sanitation classes.

NEWAH's Child-to-Child hygiene and sanitation approach in schools has been expanded to 'out-of-school' children, who tend to be from the poorer and socially excluded groups. The Child Health Awareness Committees (CHAC) are comprised of an equal number of boys and girls who train other children in health and sanitation education via posters, quiz competitions, song, dance and street theatre.

Gender and Caste Balanced Project Management Committees
In many cases rural water supply and sanitation projects fail because not all members of the community, particularly women and the poor, are fully involved in decision-making processes. In all GAP projects the project management committees (PMC) must have 50 % female members, with women in at least 2 key positions and should also include representation from all the socio-economic groups in the community.

WaterAid's partners working in urban areas focus their work on slum and squatter communities, often located on the banks of polluted rivers. In addition to supporting communities to construct household latrines (with full subsidies for the poorest of the poor), projects aim to improve the general environmental sanitation in these communities through paving of muddy lanes, installation of sewerage and drainage and introduction of solid waste management practices. In all urban projects emphasis is given to organizing poor communities so that they are empowered to bring about further positive changes in their communities in the future.

5.7.4.4 Pakistan

The Orangi Pilot Project Research and Technical Institute (OPP-RTI) low-cost sanitation program enables low-income families to construct and maintain an underground sewage system with their own funds and under their own management. OPP-RTI provides social and technical guidance, tools and supervision of implementation to lane and neighborhood organizations whom it fosters. The project has lowered costs as a result of technical research which has modified engineering standards and made them compatible with the economics and sociology of low income groups and with the concept of community participation. The model shows that people can finance and build underground sanitation in their homes, their lanes and neighborhoods. The outcome of the program is that tens of thousands of dirty lanes in many Pakistani towns have become clean and have been converted into spaces for community interaction and playgrounds for children. The organizations that constructed their sanitation systems have gone on to implement solid waste management, tree plantations, schools and health programs.

5.7.5 Conclusion

Government strategies for reaching the poorest of the poor with sanitation focus mainly on provision of targeted subsidies, decentralization of sanitation programs to local government, and the provision of appropriate financing mechanisms.

Analysis of the reasons that prevent poor people from accessing sanitation point to a combination of financial (inability to make one-off payments, lack of access to credit facilities, pro-poor subsidies failing to reach their intended targets), technical (lack of low cost options that make use of locally available materials and are appropriate to local soil conditions), social (traditional practices of open defecation, lack of land, social exclusion and poverty) and governance (government strategies for reaching the poor are neither people-friendly nor participatory) related factors.

WaterAid and partners have been addressing these issues in a number of ways. Some partners are trying to improve the effectiveness of government subsidies by providing targeted low subsidies to poor households coupled with innovative financing mechanisms, which enable people to invest in sanitation and promote savings for sanitation. These subsidies are intended to help families realize the benefits of sanitation rather than being merely a delivery of money to the poor. Other partners have been focussing their efforts on creating awareness on sanitation issues and the related health benefits and encouraging communities themselves to solve the problems of the poorer members of the community. Other approaches have focussed on creating awareness about issues of gender, poverty and social exclusion, securing paid jobs and decision making positions for the poor, developing affordable technologies, making use of local skills and resources and training the poor to become sanitation masons and promoters.

Our experiences show that programs can be designed to reach the poorest of the poor with sanitation but that this requires tailor made approaches. The challenge is how to scale up these programs to achieve the water and sanitation targets outlined in the Millennium Development Goals.

5.8 A Gender and Poverty Approach

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5.8.1 Introduction

This paper describes how a gender and poverty (GAP) approach has been adopted in Nepal to successfully target women and the poor, who have been traditionally excluded from the drinking water and sanitation sector. The paper aims at sharing the lessons learned from 5 GAP pilot projects, focusing on how the GAP approach has led to changes in NEWAH's working practices and increased access to sanitation for the poor[9].

5.8.2 Background

At the World Summit on Sustainable Development (2002) countries committed to the Millennium Development Goal (MDG) of halving the proportion of people without access to sanitation by 2015. The implications of this target in Nepal are that 57% sanitation coverage must be reached by 2015, which means that approximately *13,000 latrines need to be constructed every month for the next 12 years*[10].

In Nepal sanitation coverage is not equal across the country, nor is it associated with water coverage.

Table 5.22: Estimated Water and Sanitation Coverage in Nepal

	% of total population	**Sanitation coverage %**	**Water coverage %**	**Sanitation gap % (water less sanitation)**
Terai (the plains)	45	20	90	70
Hills	40	40	60	20
Total rural	85	31	72	41
Urban – Kathmandu	7	95	80	(15)
Urban other	8	60	60	0
Urban total	15	78	80	2
National	100	37	80	43

In rural areas sanitation coverage lags behind access to drinking water and the Terai is the most underserved area, constrained by major problems of:

Access to land – many families are either landless or have land but insufficient space to construct a latrine.

[9] Nepal Water for Health (NEWAH) is a non-government, non-political and non-profit making organization working throughout Nepal to provide clean and safe drinking water, hygiene education and sanitation. It aims to improve the living standard of the poor through community development initiatives.
[10] The MDG base year is 1990. Coverage is estimated at 14% in 1990 and 31% in 2000.

Soil conditions – in 1998 NEWAH conducted a post-project survey of the status of latrines in NEWAH projects that had been completed between three and seven years previously. One of the most important findings was the lack of durability of simple unlined pit latrines, for many years promoted by NEWAH as the cheapest and thus most acceptable alternative to the more favoured improved single pit latrines with ring system pits. Particularly in the Terai, unlined pits were found to fill with water and collapse during the monsoon season. Simple pit latrines were once seen as a way to gain wider coverage, but it seems they may actually lessen people's enthusiasm for sanitation in the long-term – leading beneficiaries to feel that latrines in general are of little use since they do not last and need to be rebuilt at regular intervals. Unlike the hills, in Terai areas there are no rocks available to line the pits.

Different cultural norms – open defecation is a long established, well-organized behaviour among many of the ethnic groups of the area. Awareness of the health risks of open faeces is low.

5.8.3 Rationale for a GAP approach

The decentralized, demand-driven approach of WATSAN projects that has been advocated world wide is based on the belief that community-centred approaches are more sustainable. This approach often assumes that proposed development interventions will automatically benefit women and the poor and that community leaders reflect their needs. However NEWAH's experience over the past 11 years is that the demand for water and sanitation services by the 'community' are too often demanded by the privileged castes and the better off men of the community, with little or no prior consultation with women and poorer men, who are often from socially excluded Dalit and ethnic groups. It follows that it is these better off men who first come forward to liaise with project staff and subsequently monopolize the management decision making positions and ownership of water supply and sanitation systems. Domination by male elites often leads to unequal access to safe drinking water and sanitation between the better off and poorer socio-economic groups and ultimately to the unsustainability of WATSAN projects.

The rationale of NEWAH's gender and poverty (GAP) approach stems from the strong links between gender, caste, ethnicity and poverty. NEWAH believes that enhancing capacities for equitable, demand-driven community resource management requires a long-term approach that addresses power relations, gender equity and poverty issues at the community level. Such an approach raises questions of whose demands are heard and being met; is it the elite or everyone in a community? The question of who participates, who is included and who is empowered is crucial in addressing poverty reduction. NEWAH's experience is that deliberate actions must be taken to enlarge people's choices, as well as providing opportunities to voice those choices.

Given the above consideration, NEWAH has recognized that unless a concerted effort is made at organizational and program level to change negative attitudes, the status quo of unequal power relations in the community will remain and negatively impact on the ability of communities to successfully and equitably manage their water resources. The GAP approach was therefore formulated and applied to address these inequities for increasing social justice, livelihoods and sustainability of projects.

5.8.4 Internalizing GAP Principles

An intense process to mainstream a gender and poverty (GAP) approach began in late 1998 with a discussion involving senior management staff about gender and poverty. A mutual consensus was

subsequently built around gender inequality as a major constraint to poverty reduction, and was identified as a priority concern in NEWAH's Logical Framework. NEWAH decided to tackle social exclusion and promote gender equality as a crosscutting theme to be mainstreamed throughout the organization.

NEWAH's mantra is "start from within, practice what we preach". Before promoting the GAP approach to partners and project communities, NEWAH had to ensure that its own staff understood the rationale behind addressing gender equity and poverty issues. However, building a GAP approach was not an overnight process. Changing people's attitudes and thinking is a long-term process that involves internalizing new values and requires the support and understanding of management. Despite gender-awareness training it was observed at the early stages that some staff, both men and more surprisingly women, were insensitive about gender issues. Many internal debates, workshops, training and research were organized to increase understanding of gender, caste and poverty in relation to community managed water supply and sanitation, which has led to a common understanding within the organization.

The GAP process has enabled NEWAH to openly discuss how to ensure greater diversity in its gender, caste and ethnicity staffing ratio, which reflects diversity in the larger society. Social exclusion is a deeply sensitive issue in Nepal and is even more difficult to address than gender discrimination, given the socio-cultural resistance to change. Changes therefore need to be carefully implemented over a longer time frame.

5.8.5 Strategies of the Gap Approach towards Sanitation

The GAP approach recognizes that without specific targeted interventions, poor women and men often do not equally benefit from projects. NEWAH has developed a number of strategies to ensure that poor households are not deprived from project benefits and that all members of the communities, men and women, from all socio-economic groups, have equal opportunity to actively participate at every stage of the project.

Gender Awareness Training to Partners and Communities
NEWAH recognizes that one of the first steps towards the inclusion of women and the poor in community development initiatives is changing people's mindset. The GAP teams facilitate gender awareness training and GAP approach orientation to both partners and communities. The purpose is to bring an awareness of gender and caste prescribed roles and attitudes that have negative impacts on the family, community and development.

Confidence Building of Women and Socially Excluded Groups to Participate in Projects
GAP teams evolved their own strategies for supporting women and other socially excluded groups to enable them to achieve equal access to project information, training and paid job opportunities. This involved many informal meetings and discussions, such as negotiating with the richer/elite groups of men and women, encouraging women and the poor men to attend

meetings and to voice their opinions. Building the confidence of both women and men to allow women to train in technical jobs and to take key positions in community management committees was also a key activity.

Identifying the Poor

In order to promote and increase sanitation coverage and, at the same time, ensure that the poor are not excluded as a result of meeting NEWAH's project requirements, targeted intervention is required. The GAP approach argues that in order to reach the poor it is necessary to identify who the poor in a community actually are. Using a well-being ranking exercise, communities themselves decide the criteria for each socio-economic group and rank households into groups. Criteria include size of land holding, food sufficiency, employment/income, indebtedness and disability. The results of the exercise are presented in a mass community meeting and debated until a consensus is reached.

Free Latrines to the Poorest Households

NEWAH provides the poorest households, identified through the well being ranking, with free latrine components up to the ground level. Simple pit latrines, while less expensive, have not been effective as communities perceive them as poor quality and therefore not worth maintaining. NEWAH's research has also found these latrines to be unsustainable as the pits fill with water during the monsoon and collapse.

Priority for project paid jobs and training to women and poor men

The GAP approach places emphasis on giving priority for paid job opportunities to women and men from poor households. This prevents the elites in the community from monopolizing the paid jobs and training opportunities. It also enables women to swiftly respond to breakdowns that immediately affect them, especially in the absence of men, who are increasingly migrating away from villages in search of employment or to escape the insurgency. Paid jobs usually include system maintenance caretakers and sanitation masons which pay approximately NRs. 125 (USD $1.64) per day.

Box 1: Female sanitation mistri as role model

Khageswora is a female sanitation mistri (skilled labourer) in the Phaperthum GAP project. She was selected as one of three sanitation mistris by the Project Management Committee. She earned Rs. 2,800 (USD $37) as a sanitation mistri and spent the money on her personal needs. She provided support in building thirty-five toilets for the project. Although she is no longer working she says that if she receives the opportunity she will be happy to work again. Now the community says that women can do the same work as men, citing Khageswora as an example.

Providing free latrines to the poorest households made it possible for them to participate in such development activities. In this community, five households received free latrine components, but only four built and are using their latrines. One old couple will build a latrine when their son returns from India.

Child and Gender-Friendly School Latrines

Research shows that more children urinate than defecate during school hours. Latrines built in schools are designed to be more child-friendly by providing more urinal facilities. Improved latrine facilities are expected to increase the attendance of girls, particularly at the secondary level, who do not attend school because of the lack of facilities, particularly during menstruation.

Health & Hygiene Education for All

Health and hygiene education are important components of WATSAN projects. The poorest are often most affected by health problems exacerbated by poverty and a lack of awareness. If every

member of the family has access to increased health and sanitation knowledge resulting in changed hygiene and sanitation practice, the positive impacts on health will be greater. NEWAH believes that health and hygiene are the responsibility of both men and women, and have trained male community health volunteers to persuade more men to attend health, hygiene and sanitation classes.

Box 2: Awareness leads to changes

Man Bahadur Bhujel is a male community worker in the Phaperthum GAP project. He belongs to a poor household. Initially Man Bahadur felt a little odd because there was no tradition of men participating in health activities in the village. However, after attending the training he learnt about many health issues. He convinced the men to participate in the tole health education and they felt it was useful for their daily life. All the men who received health education training put into practice what they learnt. Man Bahadur reported that once before his wife had tried to convince him to build a drying rack and latrine, but after attending health education he himself became aware of the importance and no longer needed to be convinced.

During the training he learnt about health issues such as the causes of diarrhoea and water borne diseases and the importance of sanitation. The Gender Awareness training also left a positive impact on the community. The traditional belief had been that only women carry out jobs like cooking and cleaning. After receiving the GAT there has been a positive change in attitude. Now, for example, when the men and women return from the field or farm, the men will help the women to cook the meal. The men are also helping in the kitchen garden.

NEWAH's Child-to-Child hygiene and sanitation approach in schools has been expanded to 'out-of-school' children as well, who tend to be from the poorer and socially excluded groups. The Child Health Awareness Committees (CHAC) are comprised of an equal number of boys and girls who train other children in health and sanitation education via posters, quiz competitions, song, dance and street theatre.

Gender and Caste Balanced Project Management Committees

In many cases rural water supply and sanitation projects fail because not all members of the community, particularly women and the poor, are fully involved in decision-making processes. Excluding women who spend a considerable part of their day collecting and using water has a negative effect on the sustainability of projects. In all GAP projects the project management committees (PMC) must have 50 % female members, with women in at least 2 of the 4 key positions. The PMC should also include representation from all the socio-economic groups in the community. This ensures women participate in decision making and minimizes the chance of management committees being dominated and controlled by male elites.

Box 3: PMC vice-chairperson's role leads to changes in her family

Dev Kumari Dhakal is a female vice-chairperson in the Phaperthum GAP project. She is one of four women members in the PMC. She attends the meetings regularly and contributes on different issues. In the meetings, all the members give their views. For example, the women members proposed to fine those who did not build a toilet. It was agreed on at the PMC meeting and was successful. All the water users are happy with her performance. Her confidence and social status have also increased as a result of her position as the vice-chairperson of the PMC. Her family members support her work and now help with the cooking so she can attend the meetings. She is an inspiration to the other women in the community.

Savings and Credit Organization

Unavailability of financial services is a major obstacle to improving the socio-economic condition of poor households and communities in Nepal. As part of the GAP approach NEWAH is piloting savings and credit organizations in project communities with the objective of making loans available to poor households to construct latrines.

5.8.6 Monitoring and Evaluation of the GAP Approach

NEWAH has recently completed its monitoring and evaluation of the five GAP pilot projects as well as ten non-GAP projects in order to assess the impacts of its GAP approach, highlight lessons learned and provide NEWAH with data for advocating in the water supply and sanitation sector at the district, national and international levels.

NEWAH identified a methodology for communities and staff to plan, monitor and evaluate sustainability, access, use, benefits and user satisfaction in a gender and poverty-specific manner, called the NEWAH Participatory Assessment (NPA)[11]. The NPA methodology reflects a more participatory and consultative approach in dealing with stakeholders. Although the NPA asks a fixed set of questions through its Household Survey, it also generates community-wide responses through focus group discussions (FGDs) on a wide set of important socio-economic issues, using a descriptive ordinal scoring system that translates qualitative experiences (elicited during FGDs, using participatory tools), into numbers. The FGDs are carried out separately by gender and socio-economic group to assess differences in project impact on each group and to measure participation by poor men and women in community decision-making.

5.8.7 Improved Latrine Coverage Due to GAP Approach

Initial analysis of data from the GAP evaluation indicates that latrine coverage in GAP projects in Terai areas is significantly higher that in projects implemented using the normal (non GAP) approach, particularly amongst poor households.

Hill Projects

- Overall latrine coverage in GAP and non-GAP hill projects was found to be similar. Coverage amongst poor households was found to be slightly higher in GAP projects (77% vs. 72%).

Terai Projects

- Overall latrine coverage in GAP projects was found to be approximately 3 times greater than in non GAP projects. Coverage in GAP projects amongst better off and medium households was approximately double that of non GAP projects. Coverage amongst poor households was found to be 9 times greater in GAP projects.
- While coverage amongst poor households in GAP projects is significantly higher than in non GAP projects, still only one third of poor households were found to have built a latrine even with the provision of full subsidy on latrine materials up to ground level. The reasons for poor households not building a latrine include insufficient land in crowded settlements; being

[11] The NPA is based on the Methodology for Participatory Assessment (MPA) which was developed by the Water and Sanitation Program (WSP), Delhi, and the International Center for Water and Sanitation (IRC), the Netherlands. The MPA was modified for use in the Nepal context following an initial application by NEWAH and renamed the NPA.

landless and living temporarily on someone else's land; not being able to afford to construct a superstructure – very few local materials (such as bamboo, wood and stones) are available in Terai areas.

Table 5.23: Comparison of latrine coverage in GAP and non GAP terai projects by socio-economic group

socio-economic group	beneficiary households	improved latrines	simple latrines	total latrines	latrine take up
terai non GAP (3 projects)					
better off	176	46	0	46	26%
Medium	252	32	2	34	13%
Poor	427	17	1	18	4%
Total	**855**	**95**	**3**	**98**	**11%**
terai GAP (2 projects)					
better off	168	96	4	100	60%
Medium	209	44	4	48	23%
Poor	192	61	6	67	35%
Total	**569**	**201**	**14**	**215**	**38%**

5.8.8 Scaling-up the GAP Approach

NEWAH has already mainstreamed the GAP approach in all its new projects, except paid unskilled labour and the savings and credit scheme. Phasing in these two elements will be considered on the basis of the GAP evaluation.

In 2003, NEWAH participated in a Technical Assistance project for the Asian Development Bank (ADB) by carrying out socio-economic surveys of 5 WATSAN projects using the NPA. Using this methodology, NEWAH highlighted issues of gender, poverty and social exclusion in WATSAN projects with the result that the next ADB loan (USD $20.5 million over a period of 5 years) to HMG Nepal for rural water supply and sanitation will incorporate some of the GAP strategies in its projects.

The draft National Policy for the Rural Water Supply and Sanitation Sector (2003) has incorporated a number of the elements of the GAP approach with regards to sanitation, namely, participatory well being ranking to identify poor households for subsidy for non-local materials to construct latrines up to pan level.

NEWAH will be holding national and district level workshops to disseminate its findings from the evaluation of the pilot GAP projects, as well as to promote the GAP approach.

5.8.9 Other Sanitation Initiatives

The GAP approach is just one of the ways that NEWAH is using to respond to the challenge of increasing sanitation coverage, especially in poor communities. To address issues of insufficient land, sanitation in slum, squatter and poor renter communities and unavailability of materials in remote areas, other sanitation initiatives are being piloted which are discussed below.

Shared latrines in poor squatter communities. A latrine block is constructed with two latrines and is shared by six families. Families are responsible for cleaning, maintaining, and operating their block on a rotation basis. Families raise NRs 10 (USD $0.13) per month per household, which covers the cost of maintaining the latrine and the tubewell.

Public latrines are an important means for poor inhabitants to defecate in a hygienic manner. They are used by residents living in slum and squatter communities as well as low-income renters. In 2002, NEWAH completed a survey of 29 public latrines in Kathmandu municipality and investigated their hygienic standards, cost recovery and service levels. Based on these findings it is working with caretakers and Ward Offices to rehabilitate and improve them.

Sani-marts are a pilot project that brings together in one place all the various components required to construct a latrine. This makes it easy for suppliers to sell and consumers to purchase what they need. Technical support for latrine construction, such as site selection and construction monitoring is also made available.

Stand alone sanitation projects in communities with access to drinking water but not sanitation, particularly in Terai areas.

Sanitation first is part of the "utthan" (improvement) program in which older NEWAH project communities identified through the Looking Back Study as requiring support are supported to improve the sustainability of the project and raise sanitation coverage. This program gives priority to the poor and other groups who may have been excluded from the initial project benefits.

5.8.10 Conclusion

The NEWAH GAP approach is evidence that projects can be designed to reach the poorest of the poor. A prerequisite to such a program is real internalization of issues of gender, poverty and social exclusion by all members of the organization from the senior management team to the field workers. By raising awareness on poverty and gender issues throughout the community, specifically identifying poor households, ensuring that women and poor men secure paid project jobs and occupy decision-making positions and by providing subsidies for latrine construction to the poorest households, the approach ensures that all sections of the community equally benefit from the projects. However such approaches require more time during implementation and skilled project staff to act as facilitators. These factors, along with provision of subsidies mean that project costs increase. NEWAH believes that if the whole community benefits from these projects, the disadvantaged are both served and empowered, and the chances of sustainability increased, this is a price worth paying.

While projects implemented through the GAP approach show increased sanitation coverage in poor communities, challenges of access to land and materials and the cost of superstructures remain significant obstacles that prevent the poor from accessing sanitation. The full potential impact of sanitation programs will never be achieved unless all households in a community stop the practice of open defecation. Therefore it is essential that the encouraging results of the GAP pilots are built upon to achieve total sanitation in communities in the coming years.

NEWAH's experience with the GAP program show how a well thought out pilot project can be used to influence large loans to the sector by multilateral organizations and how significant changes can be brought about at the national policy level.

The inclusive approach promoted by the GAP program is grounded in the concept of social justice and should be relevant to any society. Given the current political situation in Nepal an approach that aims at giving disadvantaged members of society the chance to participate in development and redress the historical imbalances in project benefits goes some way to addressing the causes of the conflict itself and should be of interest to all actors in development.

5.9 Community Mobilization: Key to Total Sanitation

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5.9.1 Introduction

Plan Bangladesh, an international child centered development organization without any religious or political affiliation, started its operations in Bangladesh in 1993. Plan supports programs in Khansama and Chirirbandar upazillas of Dinajpur, Jaldhaka of Nilphamari, Hatibandha of Lalmonirhat and Sreepur of Gazipur districts and in slums of DCC. It carries out activities in the fields of Health, Water Sanitation, Learning, Microfinance and Social development through direct implementation and through partnering with development institutions.

5.9.2 Sanitation Approaches

5.9.2.1 Welfare approach

To implement its program in Water-sanitation, Plan carried out a survey in 1996 that revealed a very low (5-6%) coverage of sanitary latrines and poor (60-70%) access to safe water in its program areas. As such sanitary latrines, consisting of a concrete slab and five rings and superstructure of CI sheets at a cost of Tk 3,000, were distributed free of cost to all the households. However, soon Plan witnessed a massive selling off of the free latrines or use for storage purpose or for repairing the roof by the communities.

5.9.2.2 Participatory approach

To make its programs effective and sustainable, in 1998-‘99 Plan under went a paradigm shift and consequently adopted a highly interactive work process called the Child Centered Community Development Approach for implementing its programs. The new approach required the staff to develop thorough understanding of their communities, an open mind to learn from the simple villagers, identify the rich, poor and poorest classes with the community, develop, implement, monitor and assess interventions with the community, simplifying technical knowledge and incorporation of positive indigenous knowledge and practices. The process revealed that in Plan areas about 60 to 70% HHs are poor and about 6 to 10% are poorest of the poor. Many superstitions like prohibition of daughter in laws to use latrines frequented by the father in law prevailed in Plan areas. Thus, Plan embarked on the new course in a ‘learning through doing’ mode.

5.9.3 Initial experiences: conventional participatory approach

As a result of initial facilitation efforts, some communities identified open defecation as a priority problem. Plan and communities formed sanitation committees, developed action plans,

joined resources, masons were selected from the community, trained and latrines were produced and distributed to the HHs. Plan and community shared the costs at a ratio of 60:40. In some areas down payments and installments were introduced to increase access by the poorer families. The initiative was strengthened through simultaneous awareness raising activities through children drama, folk songs, poster distribution, BCC sessions etc. This approach continued from 1999 to 2001. However, the outcome was still a slow increase (10 to 15%) in latrine coverage; there were delays and unwillingness to install the latrines. Use by all the family members could not be ensured, proper hygiene practices were not observed moreover the poorer HHs could not be fully reached and those who get the latrines again sold these out at a higher cost; thus dependency on Plan support remained a major challenge.

5.9.4 Current experience: Appropriate Participatory technique and Enhancing community capacity

5.9.4.1 Entry and agitation

To overcome the situation, Plan started looking for innovative approaches within and outside the country and obtained technical support for applying appropriate PRA tools and techniques. Plan learned the art of visualizing and demonstrating the extent of health hazard caused by open defecation by using appropriate PRA tools. Thus in the intervention paras or hamlets, Plan staff facilitated the children to draw social maps of their village on the ground and show the sanitation status; the children lead procession of the people and outsiders, to see the popular defecation spots in the bamboo bushes and besides the river and canals. Discussions were held deliberately in front of these spots to embarrass the villagers. They drew diagrams showing the flow of the faeces from these spots to the ponds and canals and tube well stands, during the rainy season; to utensils and other domestic materials by chicken and pets, and even to the food through flies and poultry; with some tips from Plan staff, they calculated the amount of stool generated by each person per day and they multiplied it to calculate per family, per week, per month, per year faeces production! Some even calculated the total amount of human excreta added over the last ten years in their community. More shocking facts emerged from people's analysis, that each person was ingesting the faeces of the others in one or other form everyday. Thus everyone realized that no one, rich or poor, is beyond 'risk'. The communities, disgusted by their situation, pledged to free their community from the curse of "**Open Defecation"**.

5.9.4.2 Planning

The agitated community took the leadership formed sanitation committees composed of men, women and children, rich and the poor and developed action plans with defined timeframe, based on the baseline information collected by the children. On the issue of resources, the rich came forward to share resources like land and bamboos; the poor offered labour to the poorest. The Committees held regular meetings to discuss their opportunities and challenges, resolve disagreements, negotiate resource sharing and obtaining further knowledge of technical issues from Plan.

5.9.4.3 Implementation

Plan organized exposure visits and orientations on the basic principles of a sanitary latrine to the committee members. During the interactions some members reveal better understanding of

latrine construction and make use of locally available materials to design and install their own latrines; usually the first one in the community. The successful installation is celebrated and shown as a model to motivate the other villagers. Soon other HHs follow through; some take the help of the first installers. These members termed as the 'rural engineers', to provide a noble status in the community, come up with alternate low cost options appropriate for the soil and within the capacity of the poorer HHs. They made pans of banana stems, cut tin pieces, connecting pipes of plastic bottles, flap of saline bags, used wire to bind these, bamboo cages and earthen pots for pits, perforated bamboo as the vent pipe etc. In this way the 'rural engineers' provided support to the poorer HHs in the communities on a totally volunteer basis. Thus a range of initial low costs models ranging from 50 cents to $ 5.00 have emerged and provided a way out to the poor communities to free themselves from open defecation

To raise awareness and to keep up the momentum Plan organized sanitation fair where besides other local NGOs the rural engineers also participated and demonstrated their models. Children organizations staged street drama and folk songs while documentary film shows were shown in the open fields.

5.9.4.4 Project monitoring

In the process, children took up the most important task of monitoring the progress through updating the sanitation maps everyday, marking each new house with a latrine. In some areas they formed vigilant teams that occupied popular defecation spots beforehand and start singing or blowing whistles whenever someone tried to go there; they formed processions calling slogans to let everyone know of the defaulter; in one case they even pelted the defaulter.

The villagers said for them total cleanliness would mean 'hand washing before eating and after defecation with ash or soap, use of sandals in the toilet, clean nails and teeth, covering food from flies or dirt'. The children informed that the volunteer mothers of Early Childhood Care and Development centres, school teachers, volunteers and health workers could check overall cleanliness of the children and emphasize the issue. In some paras enthusiastic children prepared cleanliness monitoring maps to record every day's monitoring results.

5.9.4.5 Plan's role

During the entire process, Plan acted as facilitator and motivator; provided necessary technical support, and uplifted the community's achievements.

5.9.4.6 Outcome

Though it has been only a year since Plan adopted this new approach, yet in the meantime the rate of latrine coverage has increased several folds. All the community members use latrines and open defecation has been totally stopped in the intervention paras and villages. Some of the paras affected by this year's monsoons, have replaced the initial models with the more hygienic and sustainable plastic pans on their own. If properly facilitated and followed up, it is possible to cover a para of up to 60 households in approximately three months time through community resources.
Plan has invested only in human resource development and the overall program budget has reduced significantly.

5.9.5 Future plan

Plan will provide support to the local government as part of the national initiative for Total Sanitation, to increase their understanding and leadership in developing a coordinated action plan for total sanitation in the five working upazillas. Plan is motivating all the stakeholders including local NGOs, CBOc, clubs etc to participate in the collaborative effort. Plan will provide technical assistance to them for spreading and scaling up the community mobilization approach for reaching all the community members, particularly the poor, for Total Sanitation.

Thematic Discussion on Strategies to reach the poorest of the poor

It was evident from the three presentations, that there were several points of commonality in the strategies being adopted by these organisations. All of these lessons were learnt by NGOs in the course of their programmes, but they apply equally to government-led approaches:

- Targeting interventions: identifying the poorest through participatory wealth ranking or well-being exercises – there methodologies provide a clearer understanding of need and in turn help in developing approaches for targeting resources and in understanding demand for sanitation amongst these groups.
- Subsidies: There was a divergence of opinion and practice on this matter, but the key point was that wherever subsidies were present they should be targeted, not only in terms of community groups, but also in terms of function (ie. subsidies for software inputs such as promotion).
- Proactive engagement: Need to adopt the community itself as a catalyst for action and change. Two examples were seen in child-to-child approaches through school sanitation programmes, and in identifying community members to act as extension workers themselves.
- Awareness: Quite simply, making information available both from within the community (and ensuring wider access to decision-making structures) and from outside the community (in relation to understanding a wide review of technology options).

Given the limited time frame, the group found it difficult to move away from the detail of implementation, and on to policy formulation. However, there was one policy-level implementation that could be abstracted from the discussions, which focused on the cry from the NGO community to 'scale-up' programmes, especially to reach the poorest, and Government capacity to respond to this demand.

This left a number of unresolved questions. For Government, in the context of decentralization and responsibility at local government level, where is the skills mix to adopt these approaches, and where are the institutional incentives for government to work in different ways? For civil society, where is the staff required to design, manage and monitor scaled-up programmes, and who will pay for Training?

5.10 Making Sanitation Work: Summary of key lessons from the Thematic Discussions

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Where are we coming from?

Past decades:

- Target driven approaches
- Aimed at technologies, getting infrastructure to individual households
- Welfare and hardware-focused subsidies to "go to scale"

Lessons?

It has not worked!

- Latrines built but not necessarily used
- Hygiene behaviors don't change, so limited impacts on health and productivity
- Subsidies don't necessarily reach poor people
- Subsidies for latrine construction actually undermine local initiative, erode scaling up

New Paradigm

Focus on:

- Changing "hearts and minds" by facilitating village-level collective action
- Change individual and community behaviors
- Use subsidies as reward rather than welfare: State of Maharastra and Govt. of India
- Changing roles for key players
  - *Communities and households* – the focal point for action and implementation
  - **NGOs** – facilitators, change agents, service providers
  - *Local Govt. agencies* – Key to any scaled up initiative
- Changing attitudes and actions for Policy makers
  - Need to create the enabling framework for the new paradigm

Key issues highlighted in the Thematic Discussions

Motivation and Collective Action

- Demand-based approach through awareness and hygiene education
- Focus on behavior change as the primary goal
- Link sanitation promotion to awareness creation of environmental issues – leads to collective action

- Use full range of community institutions
- Range of technology options and choice based on affordability and preferences
- Minimum requirement is to confine excreta, incremental improvement of technology/service over time
- Go for total coverage in communities, then expand

Supply and Demand

- Generate demand through facilitation of collective action
- Participatory approaches, hygiene education, marketing of sanitation. Focus on children's needs
- Public resources should follow and reward demand, not replace it
- Make room for the private sector too
- Supply should respond to informed choices by communities and households:
- Technology choice
- Financing options

Institutional Support

- Villagers plan, implement, and monitor under the leadership of local government
- Elected local governments – the accountable agent
- NGOs – key facilitators (+ service providers)
- Orientation of local government agencies
- Mobilization of communities – change agents
- Public agencies with the "traditional" mandate for sanitation should provide technical support for local initiatives
- Also need to focus on the "big" urban sanitation issues
- Sewerage, large-scale treatment

Strategy for reaching the poorest people

- Identify sanitation problems and solutions through participatory processes
- Communities can often address the needs of the poorest through collective action
- The better off are affected by the sanitation conditions of their poor neighbors – externality factor
- Subsidies <u>can</u> help, but <u>how they are used</u> is key:
  - Allow communities to control
  - Provide as a reward for changing behaviors Maharastra, India
  - Can be used to reward local governments too
  - Funds as rewards don't need to be used directly for sanitation

Policy implications

"People-centered, community-led, demand-driven"

- Aim should be elimination of open defecation and good hygiene behavior
- Focus on understanding and triggering demand, sustained behavior change
- Use public resources as rewards for success
- Encourage a wide range of technological options
- Strategic partnerships between local Govts, and NGOs
- Enable private sector entry, and expand the range of financing options to accelerate service delivery.

Looking further

- A success in sanitation, particularly in the use of subsidies in an outputs-based context, could have lessons for other sectors
- Education, health
- MDGs – Success with sanitation will have a great impact on achievement of regional and global MDG targets

"If South Asia succeeds with sanitation, the world will seek to emulate you!"

Chapter 6

THE DHAKA DECLARATION ON SANITATION

6.1 Introduction

One of the key outputs from the Conference was the Dhaka Declaration on Sanitation. The Conference was designed so that, while the Declaration would retain its focus as a series of Government-owned political commitments, there would also be avenues for discussion and input from the wider delegation.

There were three key vehicles through which this was achieved:

1) Secretary's Meetings on Dhaka Declaration: Secretaries or other Senior Government Servants selected by the Minister to participate in the Secretary's Meeting discussed and deliberated the contents of the draft Declaration, and in turn briefed their Minister on the discussions. Owing to time constraints, participants of this session reconvened to resume discussions on three separate occasions (one hour each). By the end of these sessions, the Conference Coordinator was able to incorporate some substantial amendments and additions to the draft.

2) Participatory Session on Dhaka Declaration: The amended draft of the Declaration was presented to all Conference Delegates in the Plenary Hall. With sufficient briefing from their Secretaries, the Ministers or Heads of Delegations were able to sit in panel and listen to comments from all Conference Delegates.

3) Ministerial Roundtable discussion on Dhaka Declaration: The purpose of this session was to ensure that Ministers and other Heads of Delegation came to a consensus on the finalization and endorsement of the Declaration. In this session, they were able to draw from the points raised in the Secretary's Meetings and Participatory Session.

6.2 Meetings of the Secretaries

Mr. Gourisankar Ghosh, Executive Director, WSSCC, was the Moderator for the session. He stated from the outset that the purpose of the session was to come to a consensus on a near-final draft, with agreement from the various technical, diplomatic and administrative heads and other heads of agencies, to take back to their political heads, so that discussions and finalization on final day could be short and succinct.

The adopted methodology was to run through the text of the draft Declaration, using it as skeleton to attach flesh or make amendments, both in terms of substance and language. All discussants participated and made detailed comments. This made for fertile debate. There were a number of core (and often overlapping) themes that were discussed. These are outlined below. Deliberations over the precise wording of the text are not included.

6.2.1 Extent of Declaration

- Should the Declaration go beyond sanitation and hygiene to include water, food safety, solid waste and other environmental issues?
- The main argument for creating a specific and focused agenda for sanitation was based on the observation that a historic tie to water often meant it was left out. Even in cases where safe water supply had reached one hundred percent, assured health benefits were not always achieved.
- The majority of discussants therefore agreed that it deserved its own focus, and that the rationale behind SACOSAN was to raise profile of sanitation. Other forums (such as the World Water Council) existed to deal with both water and sanitation.
- To reduce the incidence of infectious disease it was still considered necessary to include water. An integrated approach, which mentioned water within the Declaration, was therefore seen as being important.

6.2.2 Definition of Sanitation

- Discussants agreed that there needed to be further consensus built into the Declaration on the definition of sanitation. The extent of the definition could take from the MDG definition of 'Basic Sanitation' or could go further to clarify what was meant by the term 'Total Sanitation'.
- It was agreed that this definition needed to determine whether bad sanitation would simply represent open defecation, or whether it should go further to incorporate health implications (such as malnutrition), other unhygienic practices and unsanitary disposal methods. Whatever the case, the Declaration should make its definition through a 'paradigm', which represented the views expressed in the conference.
- There were also discussions on who should constitute the target beneficiaries within the new definition/paradigm of sanitation. Giving appropriate attention to children, in particular the elimination of open defecation through hygiene promotion and school education programmes, was seen as being absolutely essential.
- Reviewing the draft Declaration, it was also agreed that there was not in fact an urban bias in resource allocation. However, it was agreed that the poor allocation of funds for the urban poor was a serious problem that needed to be addressed.

6.2.3 Responsibility for Sanitation

- There was a lengthy discussion on the use of the term 'Local Government': should this go further to include other Government, such as local health authorities and elected local bodies?
- Despite the varying degrees of responsibility for sanitation in different countries, discussants agreed that the 'Local Government' was indeed an appropriate and universal term for local-level government, as it represented a distinctive move away from central control. It was considered more important to recognize this shift in responsibility to the local level, than deliberating over specific responsible agencies at that level.
- Government should be increasingly seen as a 'leader, promoter and facilitator', with each country translating and adopting the Declaration into its own specific policy and practice.