ONE FLY IS DEADLIER THAN 100 TIGERS

TOTAL SANITATION AS A BUSINESS AND COMMUNITY ACTION IN BANGLADESH AND ELSEWHERE

BY URS HEIERLI AND JAIME FRIAS WITH INPUTS FROM SOMA GHOSH MOULIK AND SHAFIUL AZAD AHMED

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POVERTY ALLEVIATION AS A BUSINESS SERIES

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The private sector of latrine producers has become an important rural industry in Bangladesh – with demand growing fast, there are up to 10,000 small workshops producing latrines. The country wants to achieve total sanitation by 2010 – fifteen years ahead of the Millennium Development Goals.

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SELECTED ACRONYMS AND ABBREVIATIONS USED

ANSAR	VILLAGE PROTECTION UNIT (BANGLADESH)
APC	ASSISTANT PROJECT COORDINATOR
APE	ASSISTANT PROJECT ENGINEER
ATL	ABOVE THE LINE
BDS	BUSINESS DEVELOPMENT SERVICES
BDT	BANGLADESHI TAKA
BTL	BELOW THE LINE
CLTS	COMMUNITY-LED TOTAL SANITATION
CRSP	CENTRAL RURAL SANITATION PROGRAMME (INDIA)
DPHE	DEPARTMENT OF PUBLIC HEALTH ENGINEERING (BANGLADESH)
EUR	EURO
ICDDR,B	INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH
IDE	INTERNATIONAL DEVELOPMENT ENTERPRISES (USA)
IDS	INSTITUTE FOR DEVELOPMENT STUDIES (UNITED KINGDOM)
IIMC	INDIAN INSTITUTE FOR MASS COMMUNICATION
LPP	LODHRAN PILOT PROJECT, PAKISTAN
MANTRA	MOVEMENT AND ACTION NETWORK FOR TRANSFORMATION IN RURAL AREAS
MDG	MILLENNIUM DEVELOPMENT GOALS
NGO FORUM	NGO FORUM FOR WATER AND SANITATION (BANGLADESH)
NGO	NON-GOVERNMENTAL ORGANISATION
POS	POINT OF SALE
PRA	PARTICIPATORY RURAL APPRAISAL
R&D	RESEARCH AND DEVELOPMENT
SACOSAN	SOUTH ASIAN CONFERENCE ON SANITATION
SDC	SWISS AGENCY FOR DEVELOPMENT AND COOPERATION
SED	SMALL ENTERPRISE DEVELOPMENT
WPP	WATSAN PARTNERSHIP PROJECT
SKAT	SWISS RESOURCE CENTRE AND CONSULTANCIES FOR DEVELOPMENT
SOCMOB	SOCIAL MOBILISATION CAMPAIGN
TSC	TOTAL SANITATION CAMPAIGN
USAID	UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
VERC	VILLAGE EDUCATION RESOURCE CENTRE
WAB	WATER AID BANGLADESH
WATSAN	WATER AND SANITATION
WSP	WATER AND SANITATION PROGRAM
WSP-SA	WATER AND SANITATION PROGRAM – SOUTH ASIA
WSSCC	WATER SUPPLY AND SANITATION COLLABORATIVE COUNCIL

FOREWORD

Astonishing things are happening in Bangladesh: this country of over 140 million inhabitants, most of them poor, is about to become a champion in sanitation. It may reach the Millennium Development Goals for sanitation – not only halving, but totally eliminating, the number of people without access to sanitation – in 2010, 15 years ahead of schedule.

As in the area of microfinance, where Nobel Prize winner Mohammed Yunus has initiated a revolution in banking by proving that poor people are reliable bank clients, different institutions and actors have developed an effective method to introduce total sanitation. This new concept tackles the root cause: it does not only aim at superficial results by distributing large numbers of latrines, it wants to end and ban the practice of open defecation. It applies a methodology of mobilising social pressure and awareness, enabling village after village to become totally "clean"; in that everybody uses latrines and nobody would even dare to go to the bushes for relief.

This dramatic social innovation has a tremendously positive impact on child mortality, public health and economic prosperity. Together with better hygiene practices, such as hand washing with soap, it contributes to a radical reduction of diarrhoeal diseases. The title quotes one Bangladeshi village leader who brought this innovation to the point by saying "one fly is deadlier than a hundred tigers". Diarrhoeal diseases are a major killer: every hour, some 300 children in this world are dying from it, and many children can not go to school, nor many adults go to work, as a result of diarrhoeal disease.

This new approach called "total sanitation" has three pillars: a) it considers latrine users as "clients" with different needs, instead of employing top-down concepts, providing one type of latrine for all, b) it stimulates a thriving private sector to produce and sell latrines as a business, and c) it stimulates demand with intelligent social mobilisation so that the villagers "awaken" themselves and exercise the social pressure needed to make changes happen.

Yet mobilising private initiative for sanitation must not be interpreted wrongly. Market forces alone will not solve the problem: total sanitation is clearly a public good in the domain of public health. It needs strong support from governments, civil society and – last, but not least – the international donor community. The approach was developed over a long time span in Bangladesh, and many actors have contributed to changing the old paradigm of distributing subsidised latrines to a so-called target population into the new total sanitation approach. This new approach is now bearing fruit and achieving results. It has already been successfully applied in India and demand-oriented approaches have also worked well in Vietnam and Ethiopia.

The concept of total sanitation is about to spread to many other countries, and in each of them, the approach will need to go through thorough steps of adaptation. The kind of social pressure that works in the cultural context of Bangladesh may not work at all in other cultures. Yet to make this adaptation, it is essential to understand the principles behind its success. This booklet and the companion CD, which includes many film clips, are thus a reader for all those interested in the approach and its adaptation. It is hoped that this document is useful for those who want to apply the lessons learned from this sanitation miracle in other countries.

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EXECUTIVE SUMMARY

OVERVIEW: FROM SUPPLY TO DEMAND ORIENTATION

It is a sad, stark truth that every hour, every day, enough children to fill a jumbo jet die of diarrhoeal diseases. And it is starkly, truly sad that this does not mobilise people, not really. These are children who are dying silently; there is no public outcry, no swelling of human solidarity, not like there is after an earthquake or a tsunami.

The lack of sanitation facilities – together with lack of awareness about hygiene and polluted drinking water – leads to chronic diarrhoeal diseases. It is young children who suffer the most: for them, a heavy diarrhoeal incidence can be deadly. Yet not only children, but all people in a village with open defecation, suffer from chronic diarrhoeal diseases, or epidemic outbreaks, with quite severe consequences: women and children are sick with dehydration and anaemia; they can not attend schools, adults lose many working days, and families spend significant amounts for medicines and doctors visits. Diarrhoea is a harmful, often deadly, disease and has a tremendous negative impact on development if one counts all the lost hours of productive work.

"One fly is deadlier than 100 tigers…"
…is the expression of a member of a WATSAN (water and sanitation) Committee in Northern Bangladesh. This may sound exaggerated but is the truth: how many people have been killed by a tiger? Every hour, over 300 children die from diarrhoea, transmitted from faecal germs through the water, through animals and through flies. We should therefore be more afraid of flies than of tigers and focus on the right issue.

Despite all these recognised facts, progress in sanitation is extremely sluggish. This is despite the expenditure of hundreds of millions of dollars for subsidising latrines, and despite the tireless efforts of well-meaning programmes to educate "beneficiaries" about the advantages of having a latrine. People still continue with their practice of open defecation and do not realise that each person deposits every year some 300 kilograms of potentially dangerous human faeces in the open fields. These faeces remain there, where they were deposited: rains and winds, flies and dogs, chickens and pigs will bring them back and make people sick. It is for this reason that a member of a WATSAN committee in northern Bangladesh has brought the message home to all by developing the slogan "one fly is deadlier than 100 tigers".

CHANGING THE PARADIGM: INFLUENCING DEMAND WITH STICK AND CARROT

Bangladeshis and bathrooms

"Bangladeshis do not like to spend money for latrines" was a sentence in an evaluation report on our Water and Sanitation project in Bangladesh. This sentence struck me for a long time. I had come as the country director of SDC to Bangladesh in 1987. One day, I thought, but if Bangladeshis don't want to spend money for sanitation, why do I have five bathrooms in my house, four more than in my house in Switzerland?"

This was the starting point into a long process of looking at the demand side of sanitation and led finally, in 1991, to a large conference in Dhaka: Sanitation by the Private Sector.

Supply-oriented approaches to disseminating latrines with heavy hardware subsidies have not worked and are, in many cases, total failures. As John Maynard Keynes once said "you can lead a horse to water, but you cannot make him drink". If a government or an NGO gives a family a latrine free, or with a heavy subsidy, there is no guarantee that it will be used, and experience has even shown that the likelihood that people will change their behaviour is very limited.
How can people change their behaviour? First of all, any behaviour change must be voluntary, and thus, an effective strategy should focus on making the behaviour desired by the people and more desirable to the individual. For instance, to ban smoking, several strategies have been applied, some with, and many without, success: it is now made compulsory to write "smoking kills" on a package of cigarettes, the price for cigarettes have been increased manyfold, and positive incentive messages, such as "have you ever kissed a non-smoker?", have achieved at least something. A very interesting social marketing campaign in Florida, "Truth", has successfully involved young people: a thorough market research study revealed that young people "did not want to be told what to do" and smoking being a form of "protest" was more popular the more moralistic pressure from adults was exercised. However, young people became interested and started developing ownership, once their rebellion could be focused on the lies of the tobacco companies. Now, suddenly, fighting against smoking and the big tobacco companies has become desirable behaviour, and the campaign was extremely successful.[1]

However, behaviour – although voluntary – is strongly influenced also by social norms, maybe more than anything else: if smoking is "in", many do it for social reasons, whether they like it or not. Especially if a certain undesirable behaviour is strongly banned socially, it may have a great impact. Smokers have become more and more "outlaws"; they cannot smoke in airplanes, trains, public places and soon in restaurants; if they want to smoke in an airport, they have to do it in a kind of "cage" and smoking becomes more and more socially stigmatised.

TOTAL SANITATION – A DEMAND-ORIENTED APPROACH ON THREE LEGS

Very similar methods are now applied successfully for sanitation. They awaken the desire for a hygienic environment, for a latrine or a bathroom, and, thus, stimulate a demand. They encourage a thriving private sector to satisfy this demand and they socially stigmatise the undesirable behaviour of open defecation. All these three elements together form the total sanitation approach on these three legs:

1. Stimulating demand: On the one hand, latrines can be made desirable by good sanitation marketing strategies; this is the first leg. In 1991, a study commissioned by SDC[2] discovered that it was simply not true that "Bangladeshis consider sanitation just as a cost factor without getting any benefit out of it". Many people – especially women – would have liked to have a latrine, but many could not afford them, did not have the space to install them, or latrines were simply not available because the government-owned latrine production centres were too far away. A good marketing and social mobilisation campaign was thus paving the road for a first sanitation miracle in Bangladesh. Stimulating the demand is indeed essential for a good sanitation strategy.

2. Private sector: But where do the latrines come from? The creation, stimulation and support of a dynamic and thriving private sector is the second leg, and the best way to cope with this emerging demand. The top priority is to provide efficient services: people do not only want latrines as hardware, but services to install them properly and maintain them when something is broken. However, the secret is the price and that one size does not fit all. Affordability is the most crucial factor of marketing sanitation to a low-income society; different models are needed. For the poorest segment, very cheap entry models are needed; the cheapest model is hardly recognised as a proper latrine but still doing its job: a homemade latrine for half a dollar. But people want to move up the ladder, and flexible expansion and improvement models are as important as availability of credit. Comfort and privacy may be the main reasons at the beginning, but prestige is the most important driver for latrine demand. With this, over 4,000 private workshops emerged in Bangladesh from 1990 to 2000.

3. Social pressure to ban open defecation: Only a few years ago, the third leg was discovered and developed in a masterful way: the social ban on open defecation. Just as stigmatising smokers to outlaws, a small NGO, VERC, has developed a very effective social strategy to discourage people from open defecation. This attempt to ban open defecation was supported by civil society, but to a great extent, also supported by the central and the local governments. The social pressure to do so comes from the awareness of the people themselves, and this "awakening" (see the film with the same title on the companion CD) has led to a tremendous boost in private sanitation workshops. Today, there may be over 10,000 private latrine producers in Bangladesh, making it a significant rural industry. The kind of social pressure exercised in Bangladesh is particularly compatible with the local culture, but the same type of social pressure may not work in all similar cultures the same way it works in Bangladesh or in South Asia. This fascinating story on this social process is also told here.

RESULTS: THE SANITATION MIRACLE IN BANGLADESH AND OTHER COUNTRIES

Fortunately, the news from Bangladesh is really good news: not only has Bangladesh already achieved the Millennium Development Goal of halving people without sanitation, but the Government of Bangladesh officially declared its determination to achieve the goal of total sanitation (100% coverage) by the year 2010 – fifteen years ahead of schedule. It has also developed the tools and the software to achieve this goal. Total sanitation is not only defined by the number of latrines in a village, the "sanitation coverage", it is defined as "no more open defecation in the entire village" and by a series of hygienic behavioural attitudes, including washing hands with soap or ash before eating and after latrine use, and many more changed habits. With a series of intelligent, 'smart', participatory measures, entire communities have been motivated to change their behavioural attitudes, to ban open defecation and to ensure that all people in the village – including the landless, the school children, and even visitors (in markets) – use sanitary latrines. Now, what is the health impact of total sanitation? People are well aware that sanitation saves lots of money; women in Bangladesh can even express the savings in Takas saved from medicines, doctors' fees, days of work and school not lost. But to harvest the results is possible

only through collective action, if the entire village plays the game, if the political system supports it with a strong political determination. This is the case in Bangladesh and in the neighbouring states of India and is becoming more and more an attractive option in other countries as well.

This sanitation miracle in Bangladesh and similar experiences in India and Vietnam are described here in order to draw important lessons for other countries and regions. While the good news is that the methods of total sanitation are spreading very fast into other countries, the bad news unfortunately is that similar stories as in Bangladesh look still more like islands of success in the middle of a huge ocean of failed efforts.

The hole in the bucket

Dr. Shiferaw describes the situation in Ethiopia before the sanitation situation dramatically changed in 2004 like the song of the hole in the bucket: "The rural people get sick, they are treated and leave, then they get sick, are treated again…and the cycle continues. They spend the most of their cash income on health care. (From WSP field note, Jan 2007, see the chapter on Ethiopia)

CAN THIS METHOD BE TRANSFERRED TO OTHER COUNTRIES? THE 5 Ps OF TOTAL SANITATION

For spreading the method to other countries, significant adaptations are needed, culturally, environmentally and economically. Priorities for a TV may always be higher than for a latrine. In Latin America, for example, people are interested in having a bathroom, but they may rather dream of a shower or a bathtub than of a latrine. The water closet has there such a high prestige that people may hardly accept a cheap latrine. Nevertheless, the same principles and ingredients – but strongly adapted to the local contexts may work almost everywhere.

Sanitation marketing – based on the 5 Ps and not only understood as promotion – and social pressure together may give impetus to new sanitation behaviours even in Western countries. The example of the Robidog, a system where dog owners can – and must – collect the excreta of their beloved pets shows that hygiene can be applied on animals: the 5 Ps are of paramount importance: product (a well designed plastic bag and dispenser), place (disposal bags available on all strategic places), price (free and easily available), promotion (to educate dog owners), but most important is the 5th P, people (imposing fines for not collecting the excreta and mobilising social pressure from neighbours).

What do we mean with the 5 Ps here? Sanitation marketing is often wrongly understood as just advertisement or promotion, but marketing is much more: even though it may look trivial, the 5 Ps are very important aspects of a successful total sanitation strategy:

1. Product: People do not want just one type of latrines that governments or NGOs have selected. A latrine or a bathroom is also much more than simply a piece of hardware: latrines may have emotional values and – depending on the perception – provide comfort, privacy, security, but also fear (by children because it is dark), and disgust (because of dirt, smells and flies). Having a latrine or a bathroom may be a symbol of prestige and status, and can be a dream for many people who put all their savings in a better bathroom.

2. Price: Pricing is a crucial dimension of sanitation marketing and the first demand-oriented studies of rural sanitation markets and willingness to pay showed a clear preference for affordable, cheap latrines. But this is not the case for all segments of the population: the better off people are, the more they want to invest in prestigious latrines and bathrooms, provided having a latrine or bathroom is culturally termed as a prestigious asset. For this reason, it is so important to involve the entire population, and not only the poor. In a nutshell: a good pricing policy offers a broad range of different models, from the almost free home-made entry latrine to the prestigious bathroom with gold fittings.

3. Place: A thriving and vibrant private sector that is keen to make money from satisfying the needs of the customers is a vital element of a successful sanitation strategy. Competition should keep prices at a reasonable level and allow better services to compete over lethargic supply points: with this motivation, the private latrine workshops have driven the government-owned centres in Bangladesh somehow out of business, despite the subsidies they still could provide.

4. Promotion: Promotion means advertising for desirable behaviours, for example through hygiene education, sanitation campaigns in schools, awareness-raising in mothers and children, with village and religious leaders and others such as politicians. This promotion can create the ground for better motivation and become a great stimulus for increasing the demand for sanitation.

5. People: Whenever all the other 4 Ps are in place correctly, then the 5th P, people becomes the driving force for success with total sanitation: exercising strong social pressure to change the behaviour and totally ban the practice of open defecation, even against prevailing social norms and cultures. With the methodology developed

by VERC in Bangladesh, we have an excellent model for a successful strategy, but it may need considerable cultural adaptation for other cultures.

All these Ps look trivial if examined individually, but if they are nicely orchestrated, as they are in the total sanitation approaches in Bangladesh and India, then they become masterpieces of strategies for social change.

THE STRUCTURE OF THIS PUBLICATION

The booklet is divided into three parts:

Part One is an analysis of the Bangladesh sanitation miracle through the eyes of a marketing specialist using the famous 5 Ps of marketing as a tool to describe the revolutionary process in this poor country. Bangladesh has many, problems, including poverty, but also has a remarkable talent to revolutionise development paradigms, as it did with microfinance (a contribution for which Mohamed Yunus has merited the Noble Peace Prize).

The booklet also includes two methodological parts for the reader who wants additional information and comes with a companion CD, which contains many photos and film clips on total sanitation from Bangladesh, India and Vietnam.

Part Two is a text on methodological tools for a market-driven approach by Jaime Frias, former director of IDE (International Development Enterprises) in Vietnam on the right tools to be used to design a marketing strategy for sanitation.

Part Three describes the methodological toolbox of Community-Led Total Sanitation as applied by the pioneers of this approach, the "Village Education Resource Center (VERC)" in Bangladesh, and presents the steps used in a total sanitation campaign.

Berne, Switzerland, November 2007
Urs Heierli

PART ONE: ACHIEVING TOTAL SANITATION THROUGH MARKET DEVELOPMENT AND SOCIAL PRESSURE: THE 5 Ps OF MARKETING

Sanitation – drivers for change: Prestige is the most important driver for sanitation. This man only put a plastic sheet as superstructure and his family has pressured him to invest in a proper cabin. Corrugated iron is the most prestigious material for latrines that provides the highest status in rural Bangladesh.

Sanitation – drivers for change: Privacy and comfort are the key motives for women and children to have a latrine. Going to the fields before dawn and after dusk in all weathers is bothersome. A latrine near the house provides a quantum jump in well-being. The girls to the right and below would not marry into a family without a latrine.

Sanitation – drivers for change: Social pressure and changes in behaviour are a social process and children and religious leaders are important change agents: these children have been targeted for awareness campaigns in hygiene; they recite songs. The religious leader below is the secretary of the local mosque and has considerable influence in his village. The village has decided on fines for those who are caught defecating in the open.

Sanitation – drivers for change: Private sector: with about 10,000 private rural workshops in Bangladesh today, the private sector is an important driving force for promoting total sanitation. The workshops compete and usually provide a better service than government-owned latrine production centres despite these having delivered latrines with a subsidy in the past.

THE KEY INGREDIENTS OF A SUCCESSFUL SANITATION STRATEGY

1

1.1. WHY DO PEOPLE SAVE FOR A TV OR CELL PHONE BUT NOT FOR A LATRINE?

Subsidies play an important role in sanitation promotion. Many development agencies are pushing sanitation with subsidies because "people are poor and they cannot afford a latrine." Of course, many people are indeed poor, but the reason they do not want to buy a latrine is often not their lack of money, but the low priority placed on sanitation. If a latrine in Bangladesh costs between US$ 2 and US$ 20, this investment is often less than what they spend on doctors and medicines to cure diarrhoeal diseases. Women in Bangladesh told one of the authors that one visit to the doctor can cost up to 500 BD Taka (US$ 7.50) and they used to go several times every year. With a latrine – or better yet if everyone in a village had a latrine – they could save that money.

"Some people may be able to pay but are not yet willing to spend money on a latrine. A recent study on Social Acceptability of Latrines found out that a latrine is not at their top priority list. For the people sanitation is a third or fourth priority".[3]

Why do latrines have such a low priority and why does the local population not prioritise sanitation? "There were other things that they wanted to acquire first, such as a TV, karaoke set, or even furniture", is the experience of IDE (International Development Enterprises) in Vietnam with a very successful demand-driven sanitation approach.[4]

In order to create a demand for latrines, it is thus necessary to move sanitation up the agenda of people's priorities, and this requires much more than just giving them a subsidy. First of all, it requires – through market research – a thorough understanding of the "potential benefits of sanitation to them, identifying what attracted them most, what was not relevant to them, what complied with local beliefs and aspirations, and what obstacles needed to be overcome to make behaviour changes possible."

1.2. POSITIONING LATRINES: PRESTIGE, COMFORT, PRIVACY

What IDE discovered was that people did not react to conventional top-down health education messages, but that the **status and convenience** of a latrine held a far stronger appeal for customers than did disease prevention. And such motives were also the driving forces behind the Social Mobilisation Campaign (SOCMOB), the earlier sanitation campaign in Bangladesh from 1992 to 1999: "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]

Now, it is worth pointing out here that these convenience benefits are of paramount importance for a sanitation campaign:

1. Privacy: one cannot overestimate the importance of privacy, especially for women, and even more so in a densely populated, Islamic country like Bangladesh. A thorough study revealed: "Perhaps unsurprisingly, the primary well-being concern expressed was anxiety at being seen defecating by others, mainly men. Having a latrine allowed women to have privacy (especially during menstruation) and helped them maintain purdah".[6] Not having a latrine means (for women) having to get up before sunrise and go to the field when it is still dark.

2. Convenience: In a similar way convenience a major motivational factor: it is – again, mostly for women – an unbelievable gain in well-being to have a clean latrine near the house, instead of going to the bushes, even during monsoon rains. People often complained that the bushes are full of leeches. Sometimes people, especially children, are afraid of snakes; and many also mention the foul odour in hanging latrines, badly maintained latrines or in the places of open defecation.
On the other hand, traditional beliefs suggest that the defecation places should be far away from the kitchen. "Within the hierarchy of household spaces, the kitchen is considered very pure. If the latrine is close to the kitchen, then according to local belief, it has a polluting effect on the kitchen. This has resulted in a preference for open field defecation by villagers."[7] It is, therefore, crucial to overcome these cultural obstacles and ensure that a latrine is a clean place, as well. Most likely, as men are less affected by these factors, and as they traditionally work in the fields, these convenience motives are not so obvious to them. They also manage the purses and would not easily see these advantages for the family and prioritise them accordingly.

3. Prestige: this is by far the most important of all the motivating factors and applies equally, and even especially, to men. Owning a latrine can raise the status of a family, and it also works the other way around: if not having a latrine is considered to be a reason for backwardness or not being 'modern', then a sanitation strategy has already gained half of its goal. This prestige factor was again confirmed as the most important driving force in a recent study by the WSP in Bangladesh.[8]

1.3. MARKETING SANITATION AND MAKING IT A SOCIAL PRIORITY

Promotion of sanitation based on a sound marketing strategy that was responsive to these three motivating factors was very successful in Bangladesh (during the SOCMOB campaign) and in Vietnam. It does work to stimulate the demand side with these three arguments and people are indeed very interested in having a better life: owning a latrine can be as strong a dream as having a nice house. This is certainly true among the middle classes, where the bathrooms are a major asset within a house, associated with well-being, with luxury and with the social status of a person who has "made it." This is not much different for poor people, provided they have an affordable solution at hand.

However, all this has little to do with health and hygiene. The motivation study in Bangladesh has shown that health factors rank quite low in the motivational priorities to acquire a latrine.

Marketing sanitation successfully should thus take these factors into account and primarily emphasise practical, well-being and aesthetical factors. Although these advantages seem to be evident enough so that many women may dream of a nice latrine close to their house, it is usually not enough to stimulate a genuine demand for sanitation. This is why the prestige argument is the most important: **prestige is not an individual, but a social factor, and is thus much more powerful.**

In all honesty, how many goods do we consume just to satisfy our rational needs and how much money do we spend somehow "irrationally" on luxurious items? How many products are primarily status symbols? Are cars just a means of transportation? Are watches only meant to tell the time? Why do even the poorest women wear jewellery? And why do such poor women feel humiliated and deprived if – in an economic emergency – they have to sell their jewels? It is because pride and dignity are as important – if not more – than a full stomach. And if this logic is exactly the same for poor people, perhaps it is even more humiliating for a poor woman to sell her jewels.

Status symbols are so important in life because they can simplify social messages: a person cannot distribute to everyone his/her impressive CV, nor print it on the back of a business card. The same is true for a farmer: he cannot easily explain how much land he has, but his tractor can demonstrate it easily. Thorstein Veblen has pointed out in his famous book, "The Theory of the Leisure Class", that **conspicuous consumption** is a way to express a person's social status through consumption of prestigious luxury goods. He has challenged the classical economic theory which states that demand for a product decreases if the price goes up. For luxury goods, the contrary is true: the costlier a Rolex watch is, the more suitable it is to serve as a status symbol.[10]

Motivational Factors:[9]

1. Prestige Factors	• Improved status and others' perceptions of family status • 'developing'/becoming more modern • Social pressure
2. Practical Factors	• Improvement of daily life • Facilitating greater efficiency and timesaving • Money saving
3. Well-Being Factors	• Religious well-being (maintaining purdah) • Psychological well-being (avoiding embarrassment)
4. Aesthetic Factors	• Removal of offensive odours, sights and flies
5. Health Factors	• Prevention of infectious diseases • Physical safety

It is thus extremely important to position latrines as prestigious goods and to bank on social processes that create a desire or use **social pressure** to acquire latrines as a vehicle to raise the social status of a person – or to lower the status, if they are absent. A simple question that asks students in a classroom who does or does not have a latrine at home may do wonders in creating a feeling of embarrassment if the children go home and ask: "Why do we not have a latrine?" The study by Sophie Allen quotes two examples of social influence or social pressure in a Bangladeshi village:
"... Firstly, my husband stopped me from digging a hole; he told me we didn't need one. So then I tried to persuade

him but he didn't listen. The ladies from the WATSAN committee tried to help me but they also couldn't convince him… Then I told him that I was ashamed to be in this situation (without a latrine when others have them) so I would have to leave and return to my father's house… I blackmailed him in this way and within one day he had made me a latrine…"

"(Whether to use a latrine or not)… It is like the way you wear a sari… you know how to wear it and if someone does it differently at first you wonder… but then you find out that lots of other women are wearing it like that… soon everyone wears it this new way".[11]

1.4. TO ACHIEVE HEALTH BENEFITS, THE ENVIRONMENTAL DISEASE BURDEN MUST BE REDUCED

This study also confirms the fact that the "prospect of health improvement is generally not enough to motivate latrine use," as Sandy Cairncross and Richard Feachem have pointed out in several publications.[12] This has to do with a complex set of reasons, and we would like to mention just three of these here:

1. The health benefits of a latrine are **not immediately visible** (like having a drinking water point) and do not translate easily into monetary terms;
2. The true health benefits derive from **total sanitation** and not directly from one's own latrine. Faecal germs will only disappear once everyone in a village uses latrines and once open defecation is completely banned; it does not matter whether I get sick from my own family's faeces or from those of my neighbour;
3. People tend to **repress the causality of diseases**: they tend to forget or downplay the incidences of diarrhoea and they do not directly relate causes and effects. Everyone knows that smoking is bad for the health, and even if it is compulsory to print "smoking kills" on a package of cigarettes, people do not immediately stop. In Switzerland, there is now a 'collar' available to cover up this 'annoying' message.

Collectively, four groups of **environmental diseases** are responsible for one quarter (25%) of the global disease burden. Within this group, diarrhoea is the most important disease and an "estimated 94% of the diarrhoeal burden is attributable to environment, and associated with risk factors such as unsafe drinking water and poor sanitation and hygiene."[13] The other major environmental diseases are: a) lower respiratory infections, mainly due to indoor air pollution, passive smoking and traffic induced air pollution, leading to pneumonia and similar diseases; b) other unintentional injuries such as workplace hazards, radiation and industrial accidents; and c) malaria.

Reducing the incidence of diarrhoea can be achieved through improved sanitation, but this is clearly not enough.

Sensitive Swiss smokers can buy covers to hide the message that "smoking kills" (here in German, French and Italian).

Unless people also adopt hygienic attitudes and have access to and exclusively drink clean water, the incidence of disease may still persist at previous high levels. And unless some of the other main environmental diseases are also tackled, the total burden of these diseases will still continue to be high.

If a sanitation strategy does not address these issues in a more holistic way, it has a minimal impact on health, even if some people do adopt latrines. And promising them that the installation of one latrine will immediately reduce the cost of the doctor in the following months is just a false promise. Thus, an effective sanitation strategy must go much farther.[14]

1.5. CHANGING BEHAVIOURS IS A SOCIAL PROCESS

Achieving an impact on health first requires behavioural changes and very rarely do people change an old habit just because **someone tells** them that there is a better way to do something, even if it is seemingly better for that person. Switching from open defecation to hygienic sanitation is such a fundamental behavioural change that, in order to succeed, one needs to take some of the following factors into account:

1. Changing old habits requires a personal effort and this is hardly happens due to just **rational conviction**; most people know that smoking and drinking are bad for their health, that unsafe sex can be dangerous, and that consuming non-nutritious foods such as French fries, ice-cream and sodas lead to higher levels of obesity. Knowing these facts alone does not change attitudes and thus simply spreading a **rational message** is not enough. For this reason, poster presentations showing dangerous bacteria are very ineffective;
2. If good health messages are to be spread effectively, it **matters very much who tells** it. Every person is influenced by different people, and it makes a lot of difference if a sanitation message is spread by a respected person. Village leaders, doctors, religious leaders, and school teachers are much more influential than ordinary people, and as long as these persons remain unconvinced of the necessity of hygienic sanitation, the others will not go for it either. One has thus to **address opinion leaders** and understand **who is influenced by whom**.
3. Changing the behaviour of the opinion leaders is a kind of a chicken and egg problem. Who can influence them to go ahead and change their behaviour? For this, it is important to know how different people are and that some of them will more easily change habits then others. One has to **identify the innovators and early adopters first**. Everett Rogers[15] has – based on this distinction – developed an entire theory of 'Diffusion of Innovations' which today is still the basic toolbox of modern marketing methods.
4. One has also to understand **how innovations spread from person to person**, for instance from early adopters to the early majority, to the later majority and how to include also the laggards.
5. One has to find the **right communication messages** to reach these different people; 'smoking kills' is probably less effective than 'have you ever kissed a non-smoker?' Similarly, a very strong message can be sent out if a girl says: "I will not marry a boy from a family without a latrine" and vice-versa for boys.
6. Finally, one has to understand that the diffusion of innovations is a **social process**, where many people adopt attitudes of others because they look up to them, they want to imitate them, or simply because the new way of 'wearing a sari' has become the common habit. If latrines (and hygienic behaviour) become a **fashion** then sanitation has a chance to succeed.

Such improved communication processes can work either as positive stimuli or to discrediting old habits: some 25 years ago, smoking was allowed almost everywhere except in churches. Today, even smokers in China have to enter a small room that looks like a prison cell at Beijing Airport. This social ban on smoking in public places, at the workplace, in restaurants, trains and aeroplanes has a much greater effect than showing people pictures of cancer-affected lungs.

As we will see below, '**Community-Led Total Sanitation**' **(CLTS)** is a very effective and innovative social communication process, which creates the right social pressure to ban open defecation totally, to adopt hygienic behaviour and to stimulate the demand for latrines simultaneously.[16] The advantage of this approach here is that it triggers a strong community-led motivation to clean up the mess of environmental pollution, and in this sense it is holistic and based on strong motivations, such as shame, embarrassment, but also on solidarity. CLTS is also a process that builds on rational arguments, and enforces these strongly with social action, social pressure and community cohesion.

1.6. WHY HAVE HARDWARE SUBSIDIES FAILED?

Supply-driven approaches to sanitation emphasising hardware and subsidies have failed, as the following message from the WSP newsletter shows:

"INDIA: Andhra Pradesh constructed toilets, but did not change behaviour

Andhra Pradesh has constructed almost three million toilets for poorer rural households by spending INR 281 crores (EUR 52.3 million) on sanitation promotion and construction subsidies over the last three years. However, only half of these latrines are used. Further, the present programme did not make any significant impact on the better-off households, which constitute more than 60 percent of the population. Altogether, over 80 percent of the rural population in the state still continues to defecate in the open. Responding to this the Minister for Panchayati Raj and Rural Development said 'that the programme constructed toilets, but did not change behaviour.'"

It is obvious that a subsidy-driven top-down approach cannot change any behaviour, mainly because the benefits – theoretically – are targeted only to the poor. With this, it leaves out – by definition – the village elites and the influential opinion leaders. Why should the poor change behaviour, if the rich don't?

M.N. Roy, Secretary to the Government of West Bengal and in charge of local government shows why a subsidy-driven approach does not work, describing the 'Central Rural Sanitation Programme (CRSP)' of the Government of India, launched in 1986: "The programme envisaged the construction of a uniform pattern of household toilets throughout the country for the poor and more vulnerable sectors of the community. Eighty percent of the cost of construction, up to Rs 2,500 (more than US$ 60), was to be given as subsidy. There was no involvement of either the local governments or the beneficiaries on whom the programme was imposed, without evidence of demand. The toilets constructed were often used to store things. The programme was driven by subsidy and not much effort was made to change the attitudes and behaviour of people".[17]

However, it can also work differently as shown by the Midnapur example, where one renowned NGO, the Ramakrishna Mission, was involved. They introduced a much more people-centred approach by banking on youth clubs, and practically eliminated subsidies. They increased the motivational work drastically. The appropriateness of this strategy was clearly demonstrated in a subsequent survey by the Indian Institute of Mass Communication (IMC, 1996) which observed that only 2% of the owners of toilets are motivated by subsidies while 54% are motivated by convenience and privacy. They also introduced another innovation: instead of one single model of latrines, customers could choose among 11 models; the cheapest one at a price as low as Rs 365 (around US$ 8).

It seems quite amazing and surprising that subsidies seem to inhibit, rather than promote sanitation. Now, while we strongly advocate that hardware subsidies should be abandoned or at least drastically reduced – and if used at all, these subsidies should only be targeted to the very poorest of the poor – this does not mean that the state does not have an important role to play and that public investments are not needed.

1.7. DEMAND-DRIVEN APPROACHES AND SOCIAL MOBILISATION CAMPAIGNS

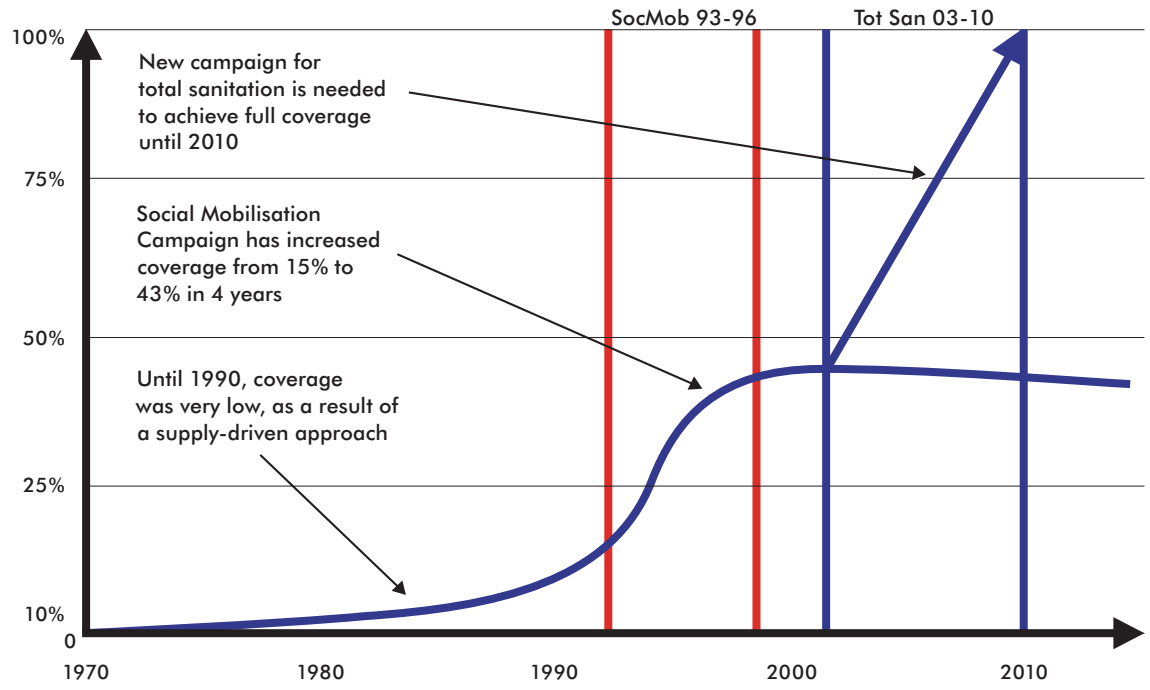
On the contrary, a lot of public investment is still needed in order to speed up sanitation and achieve the MDGs. Mr. Roy, the secretary for local government in the State of West Bengal, points out the massive policy changes required to pursue a demand-driven approach: instead of allocating 80% of the public budget into subsidising hardware and 20% into software, this proportion needs to be **totally reversed**. Eighty percent should be invested into promotional activities, demand creation for hygiene and awareness for total sanitation, and only 20% should be spent on subsidies, strictly targeted to those hard-core poor who really cannot afford the hardware.

Heavy public investments should also be directed towards school sanitation and public latrines at such places as markets, taking care to ensure their proper maintenance. This may mean that private operators should be used to maintain them.

We also advocate here for **massive campaigns** and not lukewarm programmes without full social, economic and political commitment. Social change will only happen if massive campaigns can achieve a critical mass of attention, if everyone talks about it, and if it is not simply one of 457 other points on the agenda.
There is more and more evidence that **demand-driven** approaches can be very successful and lead to high coverage rates[18] by creating a market for sanitation and emphasising behavioural changes, instead of only counting numbers of latrines.

But again, demand orientation should not be confused with **neglecting the supply side**: nurturing a thriving, innovative and competitive private sector for hardware

Graph 1: Sanitation coverage in Bangladesh



production, delivery, installation and maintenance is an equally important part of a successful strategy.

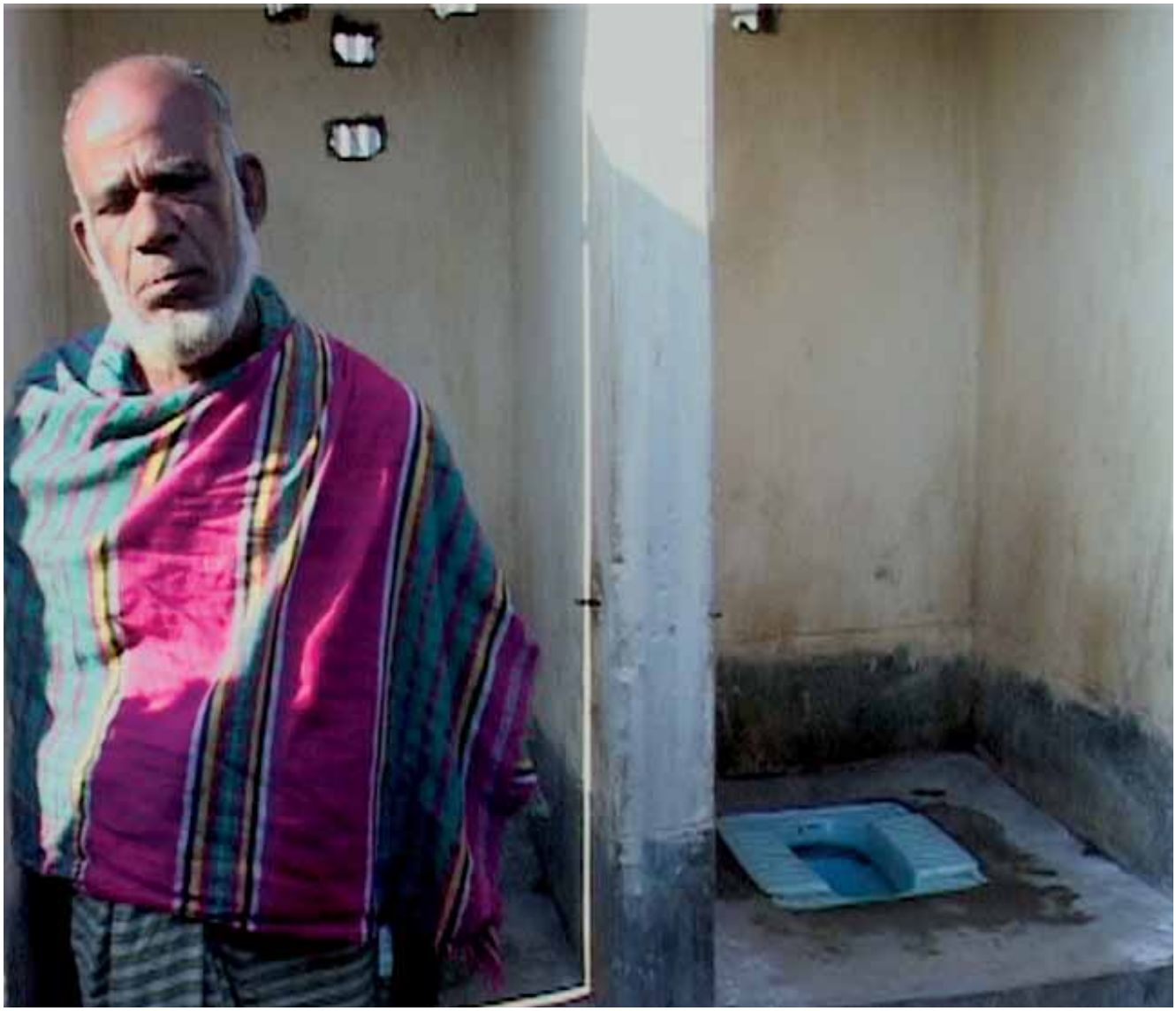
That such a strategy works in reality can be seen from Graph 1 on Bangladesh. It shows the progress in rural Bangladesh in three phases:

a) until 1990, a supply and subsidy-driven approach was pursued with modest success, and coverage increased slowly to about 15% of the population
b) from 1993 to 1996, a national 'Social Mobilisation Campaign (SOCMOB)' with a strong emphasis on private suppliers increased the national coverage from 15% to 43% in only 4 years; some 4,000 to 6,000 private latrine production centres emerged during this period;
c) from 2003 onwards, a national campaign for 'total sanitation' has been implemented with a strong social component to eliminate open defecation completely; this may lead to full sanitation coverage in 2010, ahead of the MDG target. At present, it is estimated that some 10,000 – if not close to 20,000 – private latrine producers are operating, a sizeable rural industry in Bangladesh.
Conclusion: another nationwide campaign was needed to achieve total sanitation by 2010, as is now happening in Bangladesh.

Such a campaign can fall on a responsive population as the following pictures from an urban slum show.

A pressing need – sanitation in urban slums: In the high density of a Dhaka slum, proper sanitation is even more a desire that can change the quality of life for inhabitants. Before the installation of two latrines for some 500 people, there was no privacy at all. For women and children it was a nightmare to find a place for open defecation. Most of these slums are flooded during the monsoon.

Mobilising self-initiative in urban slums: If a space – and some money – can be found to install latrines, people are highly motivated to participate and are happy to contribute to their maintenance. Fifty families have together engaged this caretaker to keep the toilets clean. They pay him a monthly salary of 500 Takas (US$ 7.50), each family contributing 10 Takas a month.



KEY ELEMENTS OF TOTAL SANITATION

2

This chapter describes the key elements of total sanitation as a market development approach. The following chapter (Chapter 3) introduces the '5 Ps' of marketing as applied to sanitation, mainly in Bangladesh.

Later in the book, a methodological section (part two) presents some marketing tools and methods. It examines how they can be used and applied to the case of sanitation programmes.

2.1. TOTAL SANITATION – A HOLISTIC COMBINATION OF SANITATION MARKETING AND SOCIAL PRESSURE

Total sanitation can be seen as a mixture of three elements: **1)** creation of demand for sanitation, **2)** the adequate supply by the private sector as an answer to this demand creation, and **3)** social pressure to ban open defecation and thus reinforcing the demand creation further.

The first two elements, creation of demand and creation of supply by a thriving private sector, can be termed as sanitation marketing, following the 4 Ps of marketing, Product, Price, Place and Promotion. The last element, social pressure, can be termed as a 5th P: standing for 'People': the social dimension of demand creation, based on social norms. The approach defined here as total sanitation has both of these two main components: sanitation marketing and social pressure; the two go hand-in-hand, and are mutually reinforcing..

The sanitation miracle in Bangladesh is the result of all of these three elements, and if we look at the impressive curve of progress in Graph 1 in section 1.7, we can see that the first rapid phase of progress (from 1990 to 1996), was mainly due to an outstanding application of sanitation marketing, and the remarkable progress from 2003 to the present is due to the application of social pressure and the marvellous innovation of the 'Community-Led Total Sanitation' (CLTS [19]) approach. It has demonstrated that CLTS has been able to trigger a radical boost in sanitation, and, without doubt, it is radical change that we need in sanitation.

However, it would be wrong to understand CLTS in a narrow sense, only as an instrument of social pressure, as this was enough to achieve total sanitation only as a social process. Latrines do not fall from the sky, and without the thriving private sector of many thousand energetic, dynamic and even aggressive latrine production workshops, such a rapid increase in sanitation coverage would not have been achieved.

This somewhat nuanced approach appears to be recognised by Kamal Kar himself in the follow-up study of CLTS, in which he describes how many small production centres have come to light in Bangladesh, while in other countries there are significant supply constraints or only inappropriate technical solutions available. In Indonesia, for example, "low cost sanitary hardware (especially plastic pans) is not available in the open market and there is also no technical guidance to communities on low-cost toilet construction using locally available low-cost materials. In China, the conditions are quite different, in that the society has long practised the collection of human faeces for use as manure. The soil is often frozen in the non-tropical areas and it is impossible to dig latrine pits.[20] All these obstacles relate to the absence of suitable products, the absence of a private sector or – in other words – the absence of an efficient supply chain. Yet the CLTS approach, despite being sometimes (and wrongly) seen as being based on a sole pillar of social mobilisation and demand stimulation, in fact embraces the need for institutional arrangements and, critically, for facilitating and developing the market to meet demand.

We thus advocate a **holistic total sanitation approach, based on professional marketing techniques and on a social process**, using the term 'holistic' deliberately in the knowledge that it is derived from the Greek word 'holos', meaning 'all, entire, total'. We note also that in a holistic approach, the true value of the entirety is more than the simple sum of its parts.

The genuine science and art of marketing is the most effective mainstream method of delivering the right goods to those who need them, in a sustainable manner. Marketing approaches are used to deliver products to the rich and to the poor, according to their preferences, no matter the extent to which those preferences can be classified as demand, nor the extent to which they are expressed in behavioural change. With the introduction of the 5th P, People, we take into account the paramount importance of community action, social pressure and government regulation and intervention.

2.2. THE DYNAMIC ROLE OF A PRIVATE SANITATION SECTOR

A key element in the **delivery** of latrines and sanitation services is often a private sector role, and it is thus of paramount importance to understand that role and, even more so, to understand what kind of fertile ground is needed for a thriving private sector to emerge.

2.2.1. HOW DID THE PRIVATE SECTOR EMERGE IN BANGLADESH?

The emergence of a dynamic private sanitation sector in Bangladesh passed through the following three main stages, as Quazi and Pramanik [21] point out (see Graph 1 in section 1.7)

1. The **Initial Phase** (1954-82: This phase was characterised by a strong supply-driven approach, in which slabs with pans were distributed free of cost. At the end of this phase, a shift from total subsidies to partial subsidies was initiated, following a study undertaken to determine beneficiaries' willingness to pay.
2. A **Transitional Phase** (1982-1990): This phase saw much stronger involvement by NGOs in the WATSAN sector; their role as motivators and social agents became recognised, and they organised themselves by creating the NGO Forum for Water and Sanitation, in 1982. Apart from the NGO sector another new actor, the private sector, made its silent entrance in the arena of rural sanitation. A very small number of small-scale, private, low-cost latrine producers started to run their own village sanitation centres. However, with respect to the overall rural sanitation sector, their presence during the 1980s was a negligible one. An integrated approach was adopted, subsidies on latrines were reduced, and a Social Mobilisation campaign (SOCMOB) was implemented on a pilot scale. Interestingly, no change took place in respect to the supply-driven approach that was even followed by the NGOs. Moreover, only a 'one size fits all' single technology, i.e. the single pit water-sealed latrine, was promoted.
3. The **Imperative Phase** (1991-2003): This phase is characterised by a paradigm shift, from supply-driven to demand-driven approaches. In this period, sanitation coverage increased from 5% to 41% in rural areas, and reached up to 44% in 1996, after the most intensive years of a country-wide social mobilisation campaign (SOCMOB). However, this sharp increase in numbers was also due to a new definition of a sanitary latrine. Whereas earlier, the definition included only the one model promoted by DPHE (the water-sealed latrine), from 1992 onwards, pit latrine and other home-made latrines were included in the definition. Using the original definition, sanitation coverage would have remained at only 36%.[22] However, this redefinition was the result of a new philosophy: shifting people from open defecation to some form of latrine was given priority over having a latrine of a certain standard. This redefinition also made room for the introduction of many more, and often much cheaper, models of latrines, thereby paving the way for many private initiatives and even self-help methods, and permitting the appearance of cheaper models and home-made solutions.

Especially in the last two phases, from 1985 onwards, a private sector of small-scale latrine producers emerged almost everywhere in the country, and by 1994, a national survey on latrine producers [23] revealed that some 4,200 latrine production centres were present in rural Bangladesh. Of these, the great majority belonged to private owners or NGOs in the form of women's groups. Initially, these producers did not receive any substantial support, but became slowly recognised as important partners for achieving sanitation goals. In 1991, a **comprehensive study by Skylark Chadha and Martin Strauss** [24] was published, and a national seminar on "Sanitation by the Private Sector" was conducted, moving the private sector, for the first time, from a marginal role into the centre of the water and sanitation strategy.

Most of these workshops are small-scale, informal sector industries with relatively little capital, and their activity is highly seasonal. Although most of the workshops have very little working capital, a study by SDC in 1992 [25] concluded that the best way to support these workshop was through demand creation, training and continued R&D, in order to allow them to produce better and cheaper products to meet the varied needs of large groups of customers.

2.2.2. PEOPLE ARE CUSTOMERS AND NOT BENEFICIARIES

The main reason why a market development approach is superior to the classical approaches is the fact that it sees **the target groups as customers, and not as beneficiaries**. Instead of the prevailing top-down approaches of supplying hardware chosen by engineers for beneficiaries, a marketing approach will consider the sanitation users as customers who make their own choices according to their own preferences. This is no small difference: it is a paradigm shift in the sense that it establishes a two-way relationship with feedback instead of a one-way street.

This **customer/provider relationship** is the agent that brings responsiveness, accountability and innovation to

An entrepreneur with commitment: Abdul Qaiyum is an ordinary villager of Sreepur, with an extraordinary enterprise. A rural sanitation engineer, he became a sanitation entrepreneur after receiving community mobilization and technical training from a WSP project. These sessions sparked his commitment to eradicating open defecation and awoke his entrepreneurial spirit. Since 2005, he has been visiting every household in Sreepur. Whenever he finds one without a sanitary latrine, he gently discusses their importance and tries to find out why the household is reluctant to install one. Through this promotion and marketing research, he has discovered that if households cannot afford to buy latrine components at one go, they are most likely to continue open defecation. This gave him the idea to sell latrines on credit at zero interest to such households. In addition, he personally demonstrated how to install a latrine so that householders could build it themselves and save on labour cost. His clients may take up to one year to repay their credit, but poor households have never defaulted on payment. Encouraged by this success, Abdul Qaiyum now extends his credit to any household requiring repair or improvement of existing latrines. He has now become a household name in his community, fondly addressed as "our rural engineer". As his business flourishes, Abdul Qaiyum has not forgotten his social responsibility, recently building a sanitary latrine beside Sreepur railway station, which had no public toilet.

Booming demand: Islam Traders is a hardware store in Chirir Bandar, Bangladesh, selling a variety of hardware and home building items. The owner, Rafiqul Islam, added sanitary latrines to his wares about 10 years ago. At that time the latrine item was viewed as a novelty and just a few rich families felt the need to buy one. Rafiqul Islam sold no more than 1,000 sets a year.

The situation took a sharp turn, for the better, in 2005. As part of the national sanitation programme, the Chirir Bandar sub-district passed a resolution to reach universal sanitation. The local government, activists, government and NGO agencies joined forces to create a massive campaign for sanitation. Suddenly, demand for sanitary latrines skyrocketed. Seizing the opportunity, Rafiqul Islam set about supplying as many latrines as possible. Doubling his staff from four to eight, his sales reached 1,000 sets a month. Where once only the rich had sometimes bought latrines before, now even less affluent people became his customer. Rafiqul Islam is proud to be a partner in this movement. He has been a key factor in eradicating open defecation from his community. As soon as demand soared, he was ready to supply a huge number of latrines by quickly mobilizing resources.

Corporate social responsibility: Moshiur Rahman is the owner of Moshiur Sanitation Hall in the Khansama sub-district in Bangladesh. When he entered the sanitation business in 2002, his main motive was to make a living.

Initially, he earned a modest enough living by selling latrines. But now his business has taken a new direction: he has become a social worker and his business more of a social service. As part of the national sanitation programme, he participated in public meetings and training sessions. His mindset was changing and he started to think about social needs in addition to his commercial business. When he saw that poor families were unable to purchase latrines, he started selling them on credit, knowing full well that this could be a risky venture.

Moshiur Rahman has indeed suffered a temporary set-back. Although his poor clients are paying back their debts, he still has BDT 17,000 (US$ 245) in outstanding loans. Moshiur Rahman is, though, happy. His village has been recognised as one where every household has a sanitary latrine.

the development system. Development agencies play a catalyst role to initiate market improvements that are systemic. The poor will not make use of a sanitation product unless they are fully convinced of its benefits. If the market fails to meet the needs of the poor, access to sanitation products and services will not be available in the long term. Thus, the market creates value when people are willing to trade a portion of their limited resources for the opportunity to make use of sanitation products and services.

The first thing that a market development strategy needs to address is: '**Who is my customer?**'. It starts with a thorough **analysis of the market and its segmentation**. Whereas development agencies have a certain type of 'beneficiary' in mind, marketing starts from the hypothesis that people are very different, that they have very heterogeneous preferences, purchasing power and possibilities, and obstacles to action. There are also many different ways that these different customers need to be addressed. Marketing would never bank on the hypothesis of '**one size fits all**', as is typical of so many failed, subsidy-driven sanitation programmes. This was the case in Bangladesh until 1991, when a sanitary latrine was the only model developed and promoted by DPHE.

2.2.3. PROFITS ARE NOT BAD: THEY ARE THE DRIVING FORCE OF SANITATION

Another key hypothesis of a marketing approach is the acknowledgement that **profit-making** is not a negative side-effect but the oil that greases the engine. Latrines do not fall from the sky, and the only way they can be produced sustainably and adapted constantly to the needs of the customers, is through private suppliers who can sell them for a profit to their customers. Profit is the incentive which motivates a latrine producer to take informed risks and identify better ways to serve new customers, including the poor. These incentives for producers to participate in the market create competitiveness, which is known to be a key benefit for the customer of sanitation.

Now, many NGO staff and development activists may have a problem with profits, especially if they are made from a business serving poor people. They would be afraid that latrine producers would exploit the poor. However, the experience in Bangladesh under the SOCMOB campaign – when an estimated 4,000 to 6,000 private latrine production centres came into existence – shows that customers have dramatically benefited from the private sector and from the fierce competition among the workshops. Not only have these private producers increased the range of products, they have also contributed to make them more affordable. As a result 60% of customers indicated the private sector as their preferred source for buying a latrine, 16% preferred a self-made latrine, 13% preferred to buy from an NGO and only 11% bought from government centres.[26]

Unfortunately, latrine production alone is not very profitable and also not totally sustainable. Most of the production centres run on very low capital (between 15,000 and 20,000 Taka; US$ 250 to US$ 300) and do not have any marketing policy. They are not in a position to advertise their products through the medium of billboards, posters, mass media; and it is even less possible that these enterprises contribute to hygiene education. A recent study also shows that most private sanitation production centres in Bangladesh have been financed by one's own savings, and not a single person took out a bank loan[27]. Although the sample of latrine producers studied was small, the study also revealed that due to its seasonality – after harvest time, sales for latrines go up and are sluggish in the lean season – the profit margins are very low. Those workshops that make products other than latrines and have greater income from other sources sell more latrines than those which exclusively sell latrines. The sector of private latrines producers is thus a vibrant rural industry, but it is a sector that has never benefited from any support from small industry programmes; it has no proper access to credits and has never received any systematic training.

It is thus an important task of NGOs and the government to permanently increase the market for sanitation through continuous social mobilisation and total sanitation campaigns. If the market for this **public good** – hygienic sanitation – is maintained and expanding, the private sector can deliver the **private good**, the hardware, in the most efficient and effective way.

However, it is also evident that these production centres cannot make a living from sanitary products alone; due to the seasonality of demand it is important to diversify into other products such as water containers for cows, concrete pillars for housing, windows and other cement-based products. It would help these production centres greatly if they could get systematic and comprehensive support from cement companies to become branded outlets for cement products and create an increased range of quality products, mainly for housing and other infrastructure needs. A recent study[28] by Syed Ahmed has also shown that the demand for latrines would considerably increase if the poor had better access to credit for latrines or if the producers would allow for purchases by instalment. It found that small producers give more latrines on credit to their customers than larger workshops. This is due to the fact that the smaller ones have a more local orientation: they sell to the people in their

village where everyone knows everyone. The downside of this is that people in the village pay their latrine instalments less frequently, **because** they know the latrine producer. These small producers thus incur greater losses than the big ones. The study has also shown that a better credit system and BDS (business development services) support would help private sector latrine producers significantly: if they have a better capital base, then they could expand much faster, and if they had other support, then they could diversify better.

2.3. IMPORTANT ROLES FOR THE PUBLIC SECTOR AND FOR NGOS

Advocating private sector participation in sanitation is not simply a neo-liberal philosophy that says that the private sector can do things better than the public sector. Yet mobilising private initiative for sanitation must not be interpreted wrongly. Market forces alone will not solve the problem: above all, **sanitation is a public good**, and it is not just pursued for reasons of well-being and convenience. As much as obtaining more privacy, comfort and even prestige are desirable arguments for promoting sanitation, the ultimate goal is to reduce the incidence of diarrhoeal diseases and child mortality.

2.3.1. SANITATION AS A PART OF PUBLIC HEALTH POLICY

Sanitation must therefore be part of a public health policy, as diarrhoea is an environmental disease which can be only reduced if a series of measures are put in place, including improved hygienic behaviour, hand-washing practices, overall cleanliness, less pollution by waterborne disease factors and safe drinking water. To develop a market for sanitation by measures of social mobilisation, by community-led action, hygiene education and awareness creation is clearly – and will remain – a top priority as a public health task. It is **only the delivery of hardware** which should be totally delegated to the private sector, and this private sector may need support. The study cited above (Syed Ahmed) also points out that NGOs and the government should completely refrain from delivering free or subsidised latrines to beneficiaries and stop the 'unfair competition' with the private sector. It is also proven that those families who had acquired their latrine on their own initiative – with or without a subsidy – had a higher satisfaction level than respondents "who had had their latrine installed by the local NGO."

The following support roles are required by NGOs and the Government as facilitators:

1. The government (and donors) should actively support massive campaigns leading to improved hygiene awareness and action;
2. NGOS should play a major role in comprehensive creation of hygiene awareness, including school campaigns and other community-based actions;
3. These activities will lead to a continued high demand for latrines and other sanitary products;
4. Subsidies should be reduced as much as possible and converted into demand stimulation; if the poorest cannot afford even the cheapest models, then subsidies should be given in the form of vouchers, so that poor people can buy their subsidised latrines from the private producers; subsidies should not be given in the form of direct delivery of latrines at a reduced price;
5. Access to credit, where possible, is highly desirable to make these private production centres more efficient and competitive;
6. R&D activities for developing better and more suitable technologies such as plastic pans, are very relevant;
7. Masons and other existing craftspeople should be trained in latrine production in order to stimulate the emergence of a private sector in areas with a low density of private producers, provided the demand has been created;
8. The government's role is mainly that of a facilitator and not of an actor who competes with the private sector.

2.3.2. THE SPECIFIC ROLES OF LOCAL GOVERNMENTS

It is also evident that NGOs can do marvellous things at a local level, but when it comes to scaling-up, even large NGOs are not able to perform all the tasks needed. For this reason, there is a special role for local governments to play.

The WSP field note on "Community-Led Total Sanitation"[29] defines this role as follows: "The 'public good' dimension of sanitation requires government intervention given its reach and mandate, ideally at the local level. In CLTS, local governments play a vital role in facilitating the mobilization of communities for collective action. They also help to develop local action plans including planning mobilization strategies, thinking of low cost technology options, providing incentives, developing the supply market, monitoring the implementation process, and achieving sanitation outcomes. Local governments are well positioned to ensure long-term benefits and sustained collective behaviour change through local monitoring processes. While nongovernmental organizations' (NGOs) initiatives have been successful in demonstrating the CLTS approach, experience shows that the involvement of the local government legitimizes local action

and accelerates scaling up. An NGO's actions are strategically utilized by local governments for mobilizing communities."

2.4. MARKET RESEARCH AND POSITIONING SANITATION

Any successful and efficient marketing strategy, including socially-oriented marketing, first needs to know: 'Who is the customer? Where does he/she live? How much does he/she earn? What are his/her preferences? How much is he/she willing, or able, to pay?'

Such straightforward questions form the basis for designing a marketing plan. Without answers to them, marketing is totally ineffective or inefficient. Which product does the customer want? What price can I ask for it? Will he/she pay me in cash? How can I communicate with my customer? Is he/she well-educated or illiterate? Does he/she read or understand a poster? Or should I send a person with a loudspeaker?

As a pragmatic form of finding out more about customers, market research is strongly related to the 5 Ps of marketing (see chapter 3). It is described more systematically in Chapter 5 on Methodological Support. Here are some examples of research questions that may be relevant to a sanitation strategy:

2.4.1. BASIC SURVEYS, WILLINGNESS TO PAY

In a 1990 survey of 400 households with, and 2,400 households without a latrine, Chadha and Strauss [30] discovered that:

1. It is primarily the more well-off households that have already installed an improved latrine.[31]
2. Those already owning a latrine are better-educated and have better houses and more cultivable land than non-owners. They belong mainly to the occupational groups of formal service holders and small business people. Non-owners, on the other hand, are mainly farmers and daily labourers.
3. The median price latrine-owners have paid is 1,600 Taka for a complete latrine installation.
4. The survey yielded the following results with respect to the willingness/ability to pay.

The 'National Survey'[32] confirmed these trends with much more representative samples and came to the following, similar conclusions:

4% can/want to pay	BDT 450 or more
27% can/want to pay	BDT 250 to BDT 450
69% cannot pay more than	BDT 250
19% cannot pay more than	BDT 100
7% cannot pay more than	BDT 70 *

* 36 BDT = 1 US$ (1990)

1. There is a strong correlation between latrine ownership and income, and an even stronger correlation between latrine ownership and education.[33]
2. Most non-users were aware of the usefulness of a latrine but could not afford one due to insufficient income.
3. About 83% of the households without a sanitary latrine indicated that the reason for not having it was that they could not afford it: the average amount of money that a household was willing to spend on a latrine was BDT 140, which might be almost enough to install a home-made latrine. Moreover, most of the households (94%) wanted to make payments for a latrine in instalments.
4. The study indicated that with proper communication and measures implemented to raise awareness, and if different cheaper models of latrines could be made available, sanitation demand was on the increase.

The conclusion of the above-mentioned study is that there is a latent demand for latrines but it is highly price-elastic, and dissemination strategies are bound to fail without taking into account the willingness (and ability) to pay.

2.4.2. OBVIOUS PREFERENCES AND TABOOS

It became evident at an early stage of the Bangladesh sanitation initiatives that very few people adopted a latrine for health reasons. A recent in-depth study in Bangladesh[34] revealed that respondents to a survey use latrines for several purposes: "These include privacy, cleanliness, convenience, social status and health. Not even a single person mentioned security considerations. All the respondents mentioned that they use latrines primarily to maintain privacy and cleanliness. The health and social status, along with these issues, were considered by only a few respondents. Nevertheless, when they were asked to prioritise the reasons, almost all of them put privacy at the top."

Sometimes, it is important to find out deeper motivations and reasons for adopting (or not adopting) hygiene practices. Such deeper reasons can be identified through focus group discussions and many intimate talks to villagers:

1. For instance, in rural India [35], there is a taboo that the kitchen is considered as a pure place, whereas latrines are considered as dirty places, and for this reason, a latrine should not be located near the home or the kitchen. Interestingly, this perception differed substantially among users and non-users of latrines: Latrine users had a strong belief that it was NOT latrines but the open field that were dirty and polluted. Non-users, on the other hand, had the opposite reaction – that it was latrines that were dirty and polluted.
2. This study also revealed that the most important factor is 'social influence' in changing the behaviour of non-users of latrines. "Latrine use was 71% in those households that reported that four or more of their neighbours used the latrine. In comparison, it was only 5% in households that reported that none of their neighbours use a latrine."

2.4.3. MARKET RESEARCH AND COMMUNICATION

The last point mentioned before shows the importance of the 'social factor' in influencing decisions. It is crucial to understand who influences whom, and who could be the carrier for behavioural changes. As shown previously, understanding the diffusion process for innovations requires knowing who are opinion leaders, early adopters, early and late majorities and finally, laggards.

A study by the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) to assess the effectiveness of a health promotion campaign on sanitation showed "that the mobilisation of schoolchildren to promote the construction and use of sanitary latrines had a significant impact on local practices. Poorer families appeared to be more responsive to the idea of building their own sanitary latrines than those who were slightly better off, who sometimes saw the homemade latrine as a symbol of low status. In several cases, the woman of the household did the construction work, rather than the man, and this aspect of women's participation could usefully be emphasised in future campaigns." [36]

Market research is thus not a standardised given procedure; it requires a lot of pragmatic sense for defining both the relevant questions and how the information should be collected.
Sometimes, the right answers can be found from statistics, correlations and large-scale surveys, but most of the information is of a rather intimate nature. As open defecation or the use of a latrine is something very private, similar to sexuality, it is often much more useful to get deep into the matter of psychological attitudes, habits and even taboos, more important than numbers of latrines.

MARKETING SANITATION AND THE 5 Ps: PRODUCT – PRICE – PLACE – PROMOTION – PEOPLE

3

Philip Kotler has introduced the 4 Ps of marketing as the '**marketing mix**' of a good marketing strategy. A marketing mix is understood to be a series of aspects that need to be very balanced and complementary, in order to achieve good sales. The literature on marketing has mentioned a series of other Ps (in fact, up to 70 Ps were mentioned) with quite different definitions of each. We feel that for sanitation, a 5th P, People, is a very crucial aspect of the marketing mix.

Marketing is sometimes understood as 'selling', but Peter Drucker pointed out that a good marketing mix makes selling superfluous. If all the 5 Ps of marketing are optimised, and if the best possible marketing mix is in place, things become very easy and very successful. Here is a description of the 5 Ps:

1. Product: customers want to choose a product to their liking; it should respond to their needs (such as comfort, privacy, prestige, pride and only in the last instance health reasons [37]); a range of different products must be available and there is no case for 'one size fits all' solutions. [38] The product depends also on the customer: some would prefer a full-fledged turnkey installation service, while some would like to contribute with their own labour by build their latrine incrementally, starting with just a plastic cover and then gradually building a firm superstructure.

2. Price: the willingness – and especially the capacity – to pay varies according to the income status of customers. Depending on the customer's choice, a latrine should be either affordable or more prestigious and luxurious. A range of technical solutions and pricing options should be made available, including instalment buying, credit and incremental models, which can start simple and be improved in due course. Usually there is no lack of expensive solutions, whereas affordable models and financing schemes are rare. Technical **minimal** standards have often led to perfectionist, 'over-designed' and too expensive solutions. Technical innovations, such as the design of a plastic pan in Bangladesh, on the other hand, have been a milestone in improved design and a crucial step in achieving affordable and aesthetical solutions.

3. Place: private supply chains to deliver sanitation products and services are not only more efficient and effective than NGO- or government-owned production units, they are also the only sustainable solution. Dynamic markets for sanitation can even provide excellent opportunities for decentralised enterprises: once a critical mass of demand has been created, the private sector will usually respond on its own. However, initially, when markets are small and supply chains are weak, support with technology, training and BDS (business development services) may be required. Latrine production centres are not always very profitable and can usually not live from latrines alone, even in the present environment in Bangladesh with its vibrant private sector and its huge demand.

4. Promotion: promotion strategies should keep in mind that sanitation may not be a need apparent at first glance, and that behavioural changes should be envisaged. This is a challenging task and requires intelligent market research to find out what people desire and what their perceptions and dreams are. Suitable and effective communication means the right messages can only be developed if these perceptions are known. Hygiene and sanitation are intimate issues and people may not easily and openly talk about their perceptions; in addition behavioural changes are required, and these may not be achieved through direct and linear communications only. As Rogers has shown in his theory on 'Diffusion of Innovations', a good communication strategy must know how people's behaviour is influenced; it is essential to know for each customer segment to whom they are willing to listen. Sanitation promotion is thus a very intricate social process and the bulk of public investment should be invested into good communication messages and strategies. This job requires professional marketing and communication agencies.

5. People: as sanitation is a social and a public issue, it is also important to involve social processes such as group pressure, to achieve a breakthrough. The 'total sanitation' approach developed in Bangladesh and India is an excellent example for such a social process, where not only consensus on need to act, but also intelligent methods to mobilise these social processes are achieved. However, 'total sanitation' may only be successful once a critical mass is there: it is pointless trying to achieve full coverage in a situation where less than 10% of the villagers have a latrine and where no private producers are available. Probably the first step to create a solid base is to address early adopters, setting up a supply chain, and only once this is in place to go for the social process of CLTS. The advantage of achieving 'total sanitation' with a very high coverage is that the health benefits will become visible, and people may save considerably on doctors' expenses. With partial sanitation

coverage, the health benefit for a person installing a latrine is much lower, as long as their neighbours continue with open defecation.

3.1. THE 1ST P – PRODUCT: MAKING A RANGE OF SOLUTIONS AVAILABLE

Philip Kotler uses the following definition for a product: "Anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a want or need". This goes beyond the simple rational attributes of a physical product and includes services.

For instance, a perfume as a product is not sold as a chemical formula or an aromatic essential oil: it is positioned as a product that gives the person who uses it a certain feeling of well-being; for instance in the case of the famous Chanel No. 5', it is positioned as 'timeless femininity'. Similar attributes in deodorants or after-shaves may imply a certain underlying kind of 'masculinity'.

Similar criteria can be applicable to sanitation products, and a simple latrine may end up as a comfortable place of privacy, cleanliness and protection, a symbol for the family's prestige, or simply a place to look after one's own beauty.

3.1.1. WHAT IS THE PRODUCT – PIECE OF HARDWARE OR A SMALL DREAM?

For most people, a place of comfort and privacy has a high value, and this is particularly true for poor people and women: having a house is the most central dream of their life, giving them dignity and security. A latrine can also become a part of such dreams, if properly positioned. In this sense, fulfilling the needs of comfort and privacy is a very important attribute of the product. And with prestige, a latrine is even more a social 'must' than just a piece of hardware.

To meet this requirement, the superstructure becomes an integral part of the latrine, and finding affordable and intelligent solutions must be a part of the equation. It is also important to provide flexible solutions with cheap entry models and the possibility of gradually upgrading and improving the latrines.

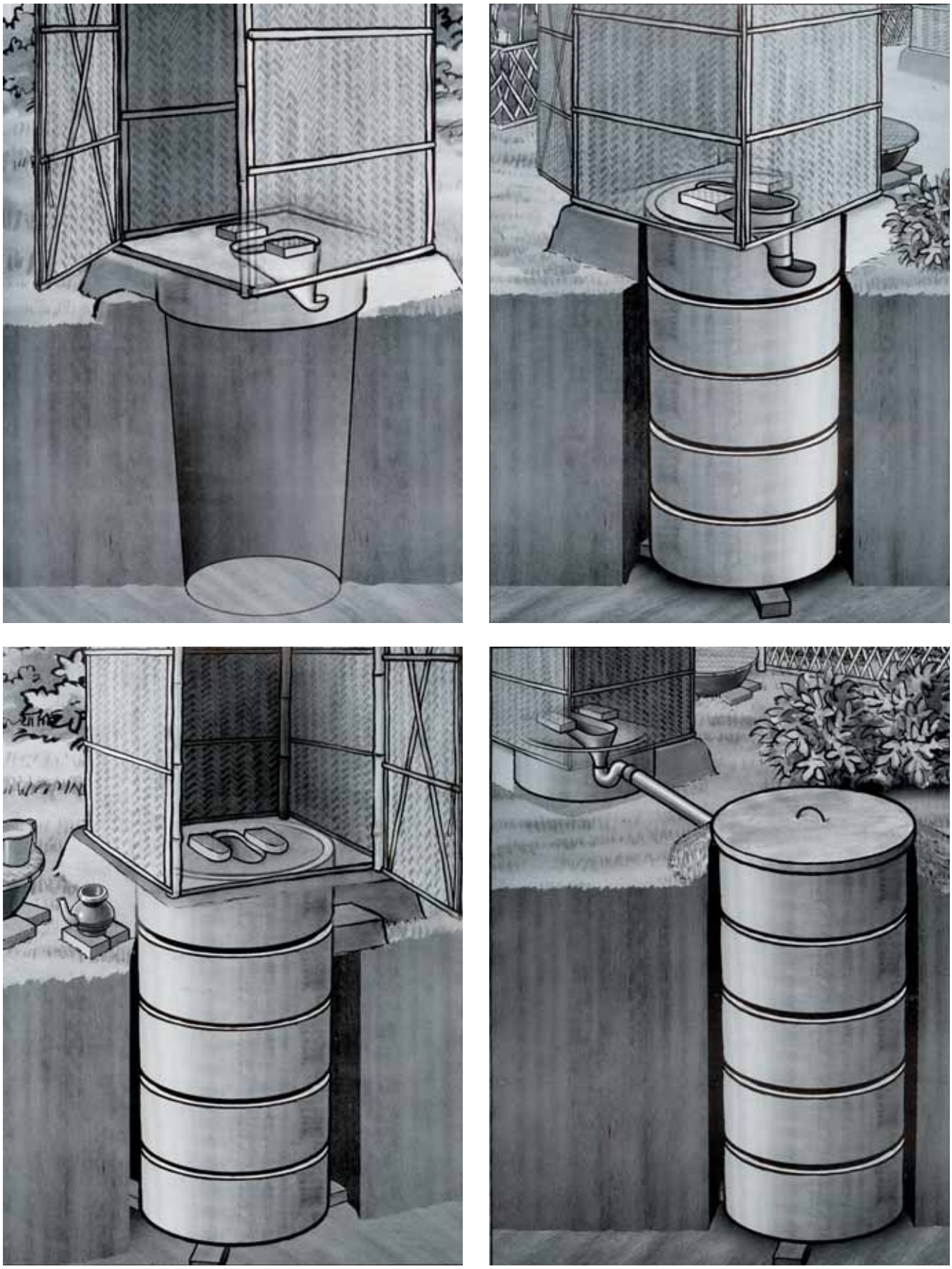
It is especially important to position a latrine as a product of prestige and status, being a natural part of a modern family. It is interesting to note that latrines are becoming more and more a part of the dowry and that a girl would not marry into a family where they do not have latrines. Prestige is the most important driving force for acquiring a latrine in the long run, and to promote it from a 'nice to have' item to a 'must-have' product is an essential element of a successful marketing strategy. This is mainly possible with social pressure, making the ownership of a latrine a symbol of family status. Children can again play a crucial role for motivating their parents. When asked at school, "Who has a latrine at home?", they would feel embarrassed to admit their family does not.

The study by Nasr and Ahmed [39] confirms this again: "The shame of open defecation and the scorn it brings from other members of the community is the main reason rural dwellers are buying sanitation items. This is especially true for families with children; when these children defecate in the open, neighbours tend to complain about the smell and the damage to the environment which in turn brings shame to the children's families. Another aspect to the prestige issue is that once a family has installed a latrine, neighbours who have not done so yet will often start using that latrine; this increases the importance of the family with the latrine."

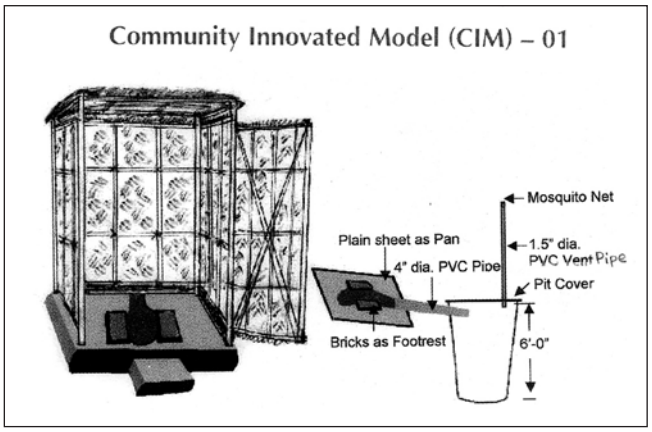
3.1.2. TECHNICAL SOLUTIONS DO NOT FALL FROM THE SKY

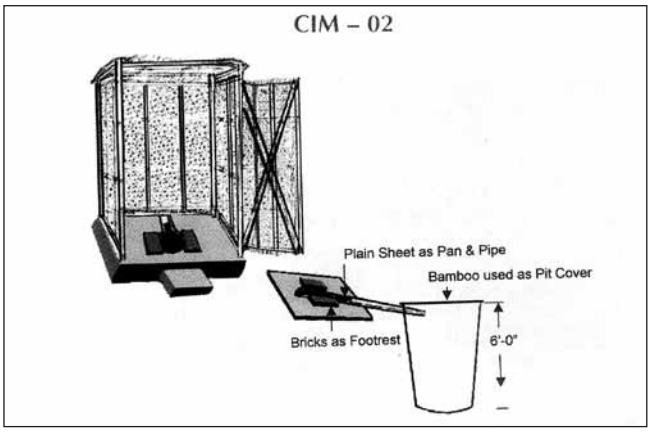
In Bangladesh, substantial efforts were invested into R&D to produce better and cheaper models. For instance, most people did not like the 'gooseneck' of the water seal latrines, and they also did not understand its water sealing function against odours. They complained that the stool was not falling directly into the pit and remained stuck in the gooseneck. Findings showed that most people were breaking the gooseneck or buying a slab without a gooseneck. One of the key problems with the gooseneck was that it requires some water to flush it, and if there is not enough water available, the toilet gets dirty. Thus instead of being hygienic, the gooseneck is a source of pollution.[40] For rural families, it was a real hassle to go four times to a water source to fetch enough water to flush the gooseneck.

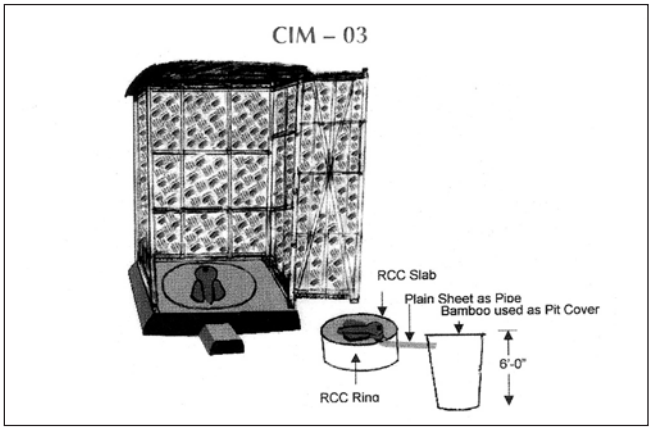
For this reason, the development of a plastic pan was a great innovation – nothing that would win a nomination for a Nobel Prize, but an extremely relevant technical innovation nonetheless. While the goosenecks made of concrete need a great deal of water to clean them, the plastic pan has an advantage in that it can be cleaned much more easily and the stool can be flushed with little water. In addition, the cost is quite moderate: if made in large quantities, it costs no more than 15 to 20 Taka (20 to 25 cents in the US). Similarly, many efforts were made to test whether the cement rings could be made thinner in order to save money and decrease the weight of the latrines.

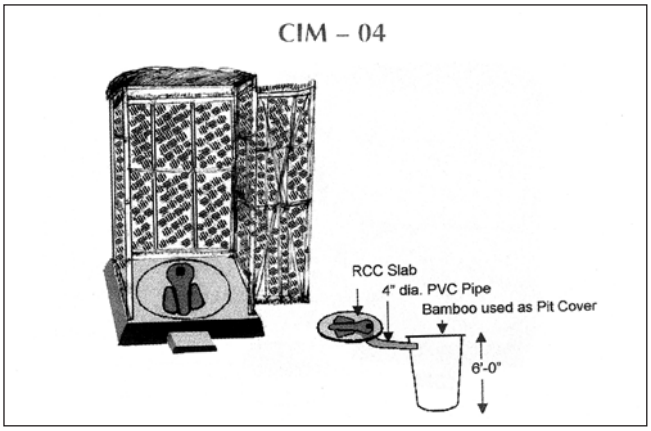


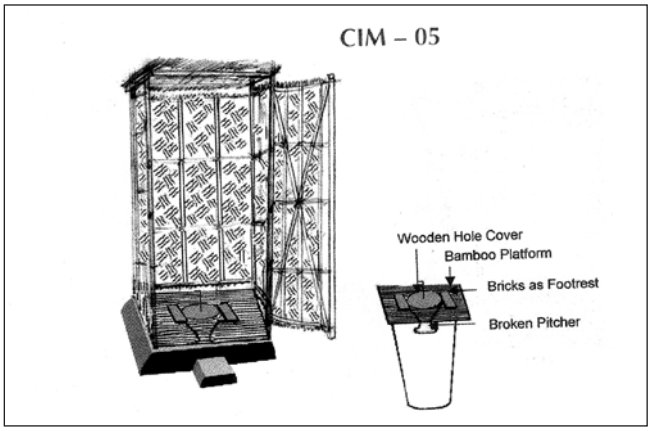
Product and Price – a range of options: The most common latrine models used in Bangladesh start with one water-seal slab and one ring. They can go to offset pit latrines with 5 or more rings.

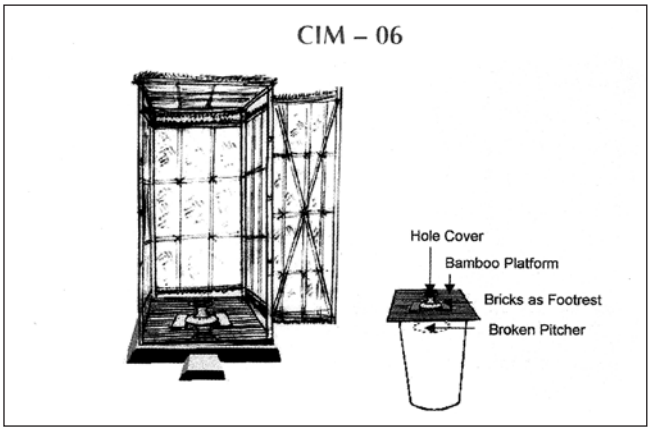


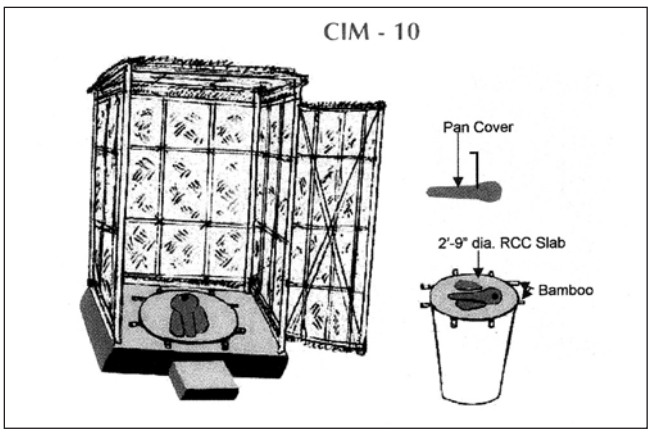


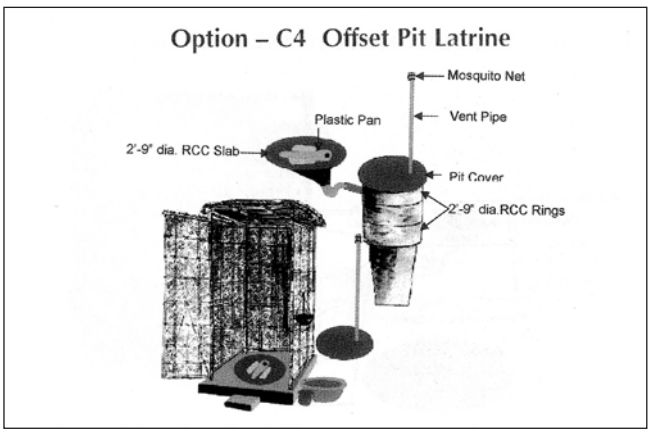












Product and Price-De-mystifying technology: many options were developed by the communities and their suggestions were taken seriously.

Another important consideration is the availability of land: most poor people do not have access to land and thus cannot build a latrine. In urban slum areas there is also not enough space available for building individual latrines. It is thus crucial to have models available that can be used by more than one family in urban slums. In a Dhaka slum, the inhabitants have even engaged a caretaker whom they pay 10 Taka a month for cleaning; 50 families are using two toilets and his salary is thus 500 Taka (US$ 8) per month. Private installers have also found innovative solutions to provide space-saving latrines to families with little land.

3.1.3. A RANGE OF OPTIONS FOR THE RICH AND FOR THE POOR

One of the most important innovations after 1990 was to open up the range of options and abandon the 'one size fits all' philosophy. Acknowledging that home-made latrines could also be a feasible solution was a milestone in increasing sanitation coverage.

However, this liberal interpretation also led to the inclusion of unhygienic latrines, including the hanging latrines. This had to do with people's perception and lack of awareness about the purpose of a latrine. 'They think that the use of a pit helps to keep the homestead clean by restricting the exposure of excreta to domestic animals and poultry. Therefore people do not feel wrong to build hanging latrines on water bodies, releasing excreta into the water'.

While this perception can only be changed through a fully-fledged awareness campaign, making available a range of options can make it easier for the poor to take the first step in adopting latrines and changing their behaviour. As we will see, the cheapest latrines in Bangladesh are models which cost less than one dollar. However, it is also as important to offer models for wealthier people, fulfilling their desire to have more prestigious latrines. The photos and pictures on the previous pages illustrate the broad range of models that are offered to the public in Bangladesh.

3.2. THE 2ND P – PRICE: TACKLING THE AFFORDABILITY PROBLEM

Affordability is the **most** important access barrier to sanitation. Many studies on the willingness/ability to pay have shown a high price elasticity. In fact, when the Chadha and Strauss study was made, the bulk of the population (69%) mentioned an upper limit of 250 Taka, but the slab with four rings already cost 350 Taka plus 60 Taka transport costs. An average superstructure would cost another 1,000 Taka in 1991 (35 Taka = US$ 1 at that time).

Finding innovative solutions to this problem was thus a primary breakthrough, and the acceptance of a series of home-made latrines paved the way for the inclusion of poor people into the sanitation movement.

The simplest and cheapest latrine today costs only 25 Taka (US 0.5) and consists of a simple piece of corrugated iron over a pit. This is not a perfect, and not by far a permanent solution, but it is an excellent entry point (see photo) into the market.

The full range of solutions is also a manifestation of a liberal perception and a true customer orientation. The fact that many agencies in Bangladesh have openly welcomed community-innovated models shows that the customer is taken seriously and that local innovation is validated and appreciated (see the pictures of the broad range of options).

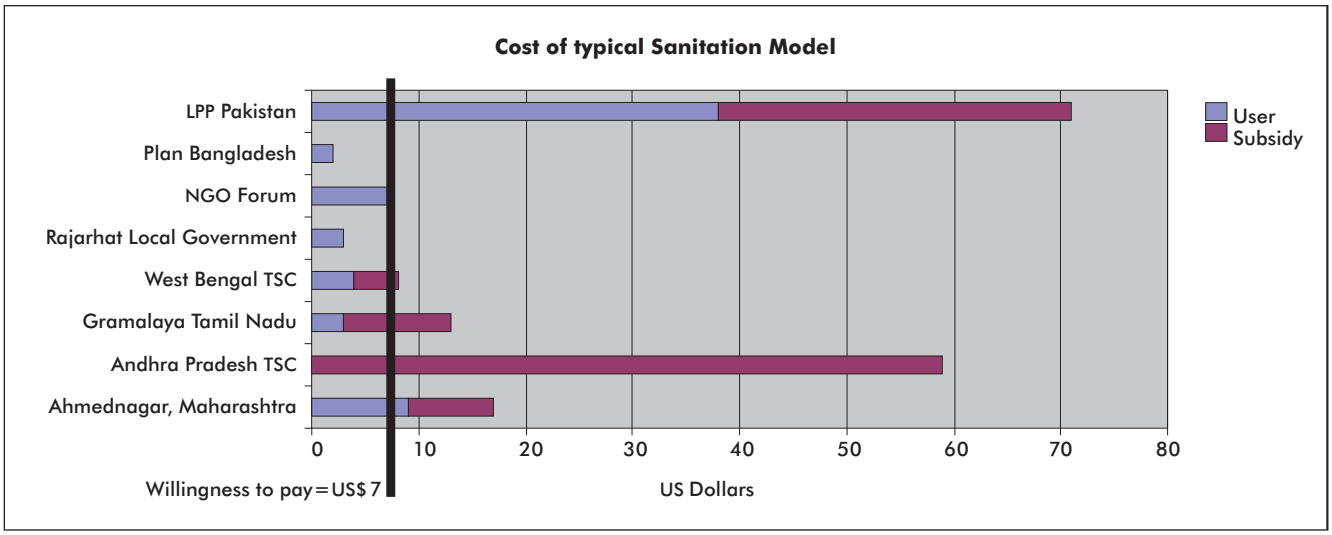
VERC, Village Education Resource Centre, a pioneering Bangladeshi NGO in sanitation, has introduced four basic options of latrines with many different variations ranging from less than US$ 1 to US$ 30.

The superstructure is not included in these prices but there is room for a broad range of options: from a simple protection with plastic sheets or jute bags, to woven bamboo huts, and up to corrugated iron structures, everything is possible. It is amazing that corrugated iron sheet structures enjoy the highest levels of appreciation and the highest status, despite the fact that this material cannot regulate the temperature well: it is too hot in summer and too cold in winter.

The availability of credit for latrines would certainly help considerably, and the inclusion of latrines in microfinance programmes is a major factor in broadening access to sanitation.

The following table [41] on the next page displays the different prices for latrines in different countries of South Asia. It clearly shows that most latrines in South Asia – with the exception of Bangladesh (Plan Bangladesh and NGO Forum) and West Bengal – are simply too expensive. What happened in Andhra Pradesh with 100% subsidy was already mentioned: 50% user rates.

This means that most sanitation programmes have simply not paid any kind of attention to pricing, and the programmes were under the wrong impression that affordability can be achieved with hefty subsidies. This



graph clearly shows why Bangladesh has become the champion in sanitation: in addition to creating very intensive and positive awareness, they have also taken their customers seriously and respected what these customers were willing and able to pay.

3.3. THE 3RD P – PLACE: MAKING 10,000 LATRINE PRODUCTION CENTRES FLOURISH

In 1985, when the first private rural producers of latrines emerged, it was still a relatively marginal business. Today, however, it is estimated that several thousand private or NGO-owned latrine production centres exist, from very small units producing hardly 5 to 10 latrines per month, to medium and large producers making more than 50 latrines in a month.

3.3.1. HOW THE PRIVATE SECTOR HAS EMERGED

These production centres have emerged because many people in rural areas saw a new chance to make a living and to create more family income. In a survey in 1996,[42] 70% of the workshops interviewed mentioned economic motives for having started their business. This main economic motive as the driving force was confirmed by the recent study of WSP.[43] However, for most of the workshops, latrine production is a seasonal production and they do not derive all their income from this type of production. Some also have other businesses and some still have some land and receive income from farming activities. They were attracted to the latrine production business because it does not require too much capital and the necessary technology is relatively easy.

While the small production centres keep their fixed costs very low and work in a flexible way by producing when there is demand, the middle and larger workshops that specialise in cement-based products diversify by manufacturing other cement-based products, including ventilators (windows), pillars for fences and telephone masts, pipes and washing platforms. Many middle and larger workshops also undertake customised masonry jobs, such as installation of latrines, house construction and other services.

The private production centres had a difficult struggle to compete with the Government-owned DPHE latrine production centres and complained bitterly about the unfair competition, as these centres could sell their latrines with a substantial subsidy. Nevertheless, the private producers have enjoyed success, and by being more efficient and more responsive to their customers' needs, they are able to compete with subsidised production. During an evaluation mission by SDC, the DPHE centres even complained that their products were piling up because of the fierce competition from the private sector.

When it comes to marketing, private producers are the preferred source of buying latrines, most likely because they provide additional services such as transport, installation and even credit. This contrasts with the cumbersome and bureaucratic procedures that are needed to obtain a subsidised latrine from a DPHE latrine production centre. However, private producers only extend credit to those customers whom they know. Also, one of the key advantages of private production centres is that they are located close to the villages, whereas the DPHE production centres are located at the Upazilla headquarters.

There is almost no capacity to promote the products. Out of ten producers, seven did not even have a signboard, nor do they keep price lists for the buyers. Only two of the private producers have had a demonstration latrine for the public. Almost unanimously the producers said

Sreepur – a small producer: Mr. Ramzan is a small producer in Sreepur, a village north of Dhaka. He produces some 20 to 25 latrines a month and he sells more or less all year round.

Sreepur – a middle-sized producer: Mr. Mustafa produces some 50 latrines a month. He has diversified into other cement-based products such as poles for fences and electricity and watering vessels for cows.

Rohtipur – a large-scale producer: In his village south of Dhaka, Mr. Aftab Uddin produces some 100 latrines a month. He too has diversified into other cement-based products.

they would expand their business if they had access to more capital.

It is, however, very clear that private producers **do react** to the market; they **cannot create a market** for latrines, and even less contribute to hygiene education. In this sense, the intensive SOCMOB campaign has not only helped them to get into business, the demand creation was the main reason why these private producers were flourishing so well. At the same time, they played a very crucial role in delivering the goods that the SOCMOB campaign wanted to promote.

3.3.2. THE FUTURE OF PRIVATE LATRINE PRODUCTION CENTRES

The estimated 4,000 private production centres have somehow survived, even after the SOCMOB campaign came to an end in 1996, and sanitation promotion declined. With the new impetus from the total sanitation campaign, from October 2003 onwards, they are again increasing. There are no exact figures available, but we estimated the number of private production centres at more than 10,000 during my field visit in November 2005. It seems plausible that every Upazilla (Sub-district) has at least three production centres on average, and with 4,500 Upazillas this would add up to more than 10,000 producers.

This is a sizeable rural industry, and it is probably one of the most important rural non-farm activities in Bangladesh. Apart from the demand creation through SOCMOB, and the new total sanitation campaign, these workshops have never received any major support from any small enterprise programme. It looks as if everybody just takes them for granted; they are there as if they had been there forever. Probably, many people think: 'well, they make profits, so what is the problem?' The problem is that most production centres make only small profits. And without diversification they may only survive as long as the sanitation demand is booming.

However, what fantastic potential! They will still grow in line with the demand for sanitation, but they could do much better. With the rise in overall incomes, with the remittances from the Bangladeshi migrants, and with the continuous trend of urbanisation in Bangladesh, there will be a considerable demand for housing. Cement-based building materials are an ideal solution to answer to this potential demand. These production centres would need support with training, access to low-cost equipment and access to credit.
One of the most promising options could consist of a public/private partnership with a cement company; this could create a win-win situation by strengthening the production centres and could aim to develop this market systematically, especially to cater to the latent housing needs in rural Bangladesh. The larger production centres are already very good clients of cement companies and consume up to three tons of cement per month. [44]

The housing market in Bangladesh is still dormant in rural areas outside of Dhaka, but it will grow. Most of the remittances flowing in from abroad are invested into housing. One of the typical characteristics is the **incremental construction process**, as poor people build their houses brick by brick, over a long period. With proper training, access to technology, equipment and capital, these production centres could become a major pillar of rural industrialisation and, at the same time, provide the oil to grease the sanitation engine in Bangladesh.

3.4. THE 4TH P – PROMOTION: THE ESSENCE OF THE SOCMOB CAMPAIGN

The first SOCMOB campaign in Bangladesh was a paradigm shift from service delivery to demand creation. Although the demand for latrines was basically motivated by the factors of comfort, privacy and prestige, the SOCMOB campaign from 1990 to 1998 also wanted to achieve some behavioural changes, through awareness creation.

3.4.1. CREATING A DEMAND PULL THROUGH MOTIVATION

SOCMOB aimed to mobilise the population for sanitation through the government channels, NGOs and the civil society (schools, teachers and volunteers). It used many different communication tools such as:

1. Mass media and communication through house visits. miking (a rickshaw with a microphone and loudspeaker to disseminate messages), rallies, posters, leaflets and discussions at the village level;
2. Interpersonal communication through courtyard meetings, bringing messages from school children home to their parents; exhibitions of latrine making and involvement of religious leaders, mainly the Imams, but also other reference persons in the villages, for example ANSARS, an auxiliary army force with over 270,000 members, present in every village in Bangladesh.

SOCMOB mobilised also volunteers in every village, and was addressing the entire village population, not just the poor. The latter was a real innovation for the NGO community: Involving the elites was, in fact, part of a new strategy, as the campaign was aimed to mobilise opinion

Social mobilisation – Children as change agents: Children are important change agents for awareness creation. The girls (upper left) perform songs on water and sanitation; the children (upper right) are taking part in an open air school and the kids below perform a village drama. Theatre is a very popular and effective way to disseminate messages and children are quite influential when it comes to changing the behaviour of their parents.

Social mobilisation – involving children and schools: Small children (upper left) are the real beneficiaries of total sanitation, as their health improves significantly. A brigade of students is chanting slogans to ban open defecation (upper right). It is crucial to equip all schools with sanitary latrines and ensure proper maintenance. If the school latrines are not maintained and remain a dirty place, social change will not likely happen. In Peru, children are sent to the school latrine as a punishment…

Social mobilisation – roadmap for success: A young village committee member explains the steps towards total sanitation for her village (upper left). A village singer inspires people with songs carrying hygiene messages; songs are very popular and effective in Bangladesh (upper right). Villagers are charting the future: on a large map, the roadmap for success is charted and the entire village participates (below).

leaders. The campaign was especially addressing the better-off, and motivating them to change their behaviour by adopting hygienic sanitation practices. They could then serve as examples for the rest of the population.

3.4.2. RESULTS OF THE SOCMOB CAMPAIGN

Two evaluations [45] have shown some striking results of this SOCMOB campaign, and it can be considered an outstanding success:

1. A remarkable increase in sanitation coverage – in the most intensive areas coverage went up to 90% – was achieved, and a significant behavioural change also took place.
Large parts, or even the very broad majority, of the population, were involved in some part of the campaign, and almost all heard sanitation or hygiene messages from one source or other.
2. It appears that oral media, such as miking, and, even more so, personal household visits, were the most effective tools to achieve a behavioural change.
3. The involvement of community leaders, and of the Imams in particular, was also very effective.
4. The massive demand increase stimulated the emergence of a dynamic private sector for latrine production.

However, the campaign also had some significant limitations and shortcomings:

1. SOCMOB could not really trigger a deep-rooted social process, and thus could not profoundly change attitudes.
2. For instance, while 87% of the interviewed persons heard of the need for hand-washing, only 35% of the population was practising hand-washing with soap; this was below the set target of 40% for the SOCMOB campaign.
3. While motivational activities in the form of miking and other information dissemination were very intensive, it did not always lead to behavioural change and full acceptance of the improved hygienic practices.
4. Building hygiene awareness should be made a continuous process to motivate non-users of sanitary latrines and non-acceptor of hand-washing.
5. Another main constraint was also poverty: many of the poorest people did not have the resources, much less the land, to build a latrine [46].

In summary, one can say that the SOCMOB campaign has laid the foundation for a solid change of course in sanitation practices in Bangladesh; it indeed triggered a substantial demand stimulation, and a dynamic private sector responded to this new situation, but it could not dig deep enough to maintain a self-propelled social process that was fully sustainable. After SOCMOB was halted in 1996, latrine coverage decreased again, and fell from 48% back to 43% in the year 2000 [47]. The SOCMOB campaign was stopped due to lack of funding, mainly because after 1996 the priority of the government and of donors in the water and sanitation sector was shifting away from sanitation towards arsenic mitigation.

However, from 2003 onwards, the train was again set back on the rails, and a new campaign towards social mobilisation for total sanitation started.

3.5. THE 5TH P – PEOPLE: SOCIAL PRESSURE FOR TOTAL SANITATION

As a result of the South Asian Conference on Sanitation (SACOSAN) 2003, [48] not only Bangladesh, but most of the South Asian countries, have adopted a 'people-centred' approach to sanitation. The member states recognised that conventional top-down approaches used in earlier sanitation strategies were 'counterproductive in nature.' Bangladesh has already reached the Millennium Development Goal of halving the number of people without sanitation compared to 1990, and declared its intention to achieve not only 50, but 100% sanitation by 2010, and thus reach the MDG targets for water and sanitation 15 years ahead of schedule - a bold and ambitious goal. By June 2005, Bangladesh's sanitation coverage reached an all-time high of 59%, which reflects by far the best outcome in the South Asian region." [49]

3.5.1. ACHIEVING 100% SANITATION NOT LATRINE COVERAGE

After many thorough evaluations of past programmes, the SACOSAN conference adopted an open and honest language, and realised that latrine coverage does not automatically mean latrine use. A baseline survey in 2003 revealed that, out of 21 million families, 12 million households (57%) had a latrine, but there were only 6.8 million latrine user households (32%).[50]
The basic difference between the approaches 'hundred percent sanitation' and 'hundred percent latrine coverage' is quite fundamental: "While hundred percent latrine coverage denotes a quantitative state of achievement, hundred percent sanitation attaches a long-lasting qualitative value to this achievement." [51] Or, as a village leader put it: "People should not install hygienic latrines in household premises; people must first install it inside their mind – in conscience and belief."

But the main emphasis – and the reason why it is so successful – **is the social process involved**: the plan to

Total sanitation – mobilising the village 1 : Good facilitation is essential to mobilise a village and initiate a social process that can lead to total sanitation. The 'transect walk' through the village to map it fully and go together to hidden places of open defecation is also called the 'walk of shame'.

Total sanitation – mobilising the village 2: The total sanitation approach uses the mapping methods of PRA (Participatory Rural Appraisal) develop by Robert Chambers to visualise social issues. The total volume of faeces of a village is jointly calculated (upper left) and the power structure in a village is mapped (upper right). The picture below shows the mapping of all houses of the village, the latrines, the places of open defecation, trees and other useful information.

achieve 100% sanitation is only possible if it triggers a **social movement**. Thus, it is the 5th P in marketing, the 'people' factor that needs to be mobilised and fully unfolded. It must finally lead to a process made by the people themselves, and governments and NGOs are only facilitators. The new plan is thus a continuation of the SOCMOB principles but with even more emphasis on behavioural changes, ongoing demand-orientation, and on social processes.

3.5.2. COMMUNITY-LED TOTAL SANITATION IN A NUTSHELL

The CLTS approach has developed a range of very simple, but amazingly effective, social awareness creation techniques, and has embraced the instruments of institutional arrangements and market development. These techniques are summarised here and a more detailed description of each step can be found in the methodological support of Part Three of this book.

CLTS was developed in Bangladesh by Kamal Kar [52] and implemented by the Village Education Resource Centre (VERC) and WaterAid Bangladesh. This was in cooperation with the Institute for Development Studies (IDS) at the UK University of Sussex, and was greatly inspired by the participatory rural appraisal (PRA) approach of Robert Chambers of IDS. Dr Kar was later a visiting member of IDS.

These are the basic steps of the CLTS methodology that require a good facilitation process.

1. A '**transect walk**' through the village, during which all the different types of latrines used by different households are visited. During this walk, the group of villagers would stop in some places where people generally defecate openly… These transect walks proved to be the single most important motivating tool, as it usually became a **walk of shame**. The initial embarrassment during this walk gave way to a strong desire to stop open defecation. It seems that, although people had seen the filth and dirt every day, they seem to have only awakened to the problem when visiting with groups of outsiders, who caused the people to analyse their situation in great detail. The transect walk ends with a procession of all members of the community who attended. Children in particular play a crucial role by chanting slogans to stop open defecation. Usually, at the end of the walk, a community meeting is scheduled to discuss follow-up action.

2. Visualisation tools: In a subsequent meeting with the community, people draw a map of the village together (on paper or simply on the ground) and indicate whether or not each household has a toilet. Next, common places in the villages visited by households for defecation are marked on the map, and are connected to the households that visit those places for defecation purposes. Defecation maps and defecation mobility maps, a map that traces contamination patterns, are prepared by the community to see how ponds and other water sources become contaminated.

3. Joint calculation of faeces: the community also carries out a collective calculation of faeces produced. People start from an initial unit of measurement per person, and then keep multiplying to calculate contribution per family, per week, per month and per year. As every family produces roughly one ton of faeces per year, this amounts to staggering total figures, even for small villages. Smaller towns will easily produce up to 100,000 tons equalling roughly 20,000 trucks of faeces, per annum. The communities are generally horrified by such figures and they immediately start to wonder about the various routes of contamination. These routes are then drawn in flow diagrams to trace the routes to ponds, household utensils, domestic articles and, most importantly, food, through flies, chickens and pets. It is in this process that they realise that 'one fly is deadlier than 100 tigers'.

4. The plan of action: the crucial step is to transform the awareness and zeal from this enlightenment into action. Usually, the community then decides on an action plan with some immediate positive results, such as:

- formation of a Community WATSAN Action Committee;
- listing of all households identifying their present sanitation status (having or not having a latrine);
- digging pits and using them as makeshift latrines until they construct a permanent one;
- developing individual family plans to stop open defecation;
- commitments by better-off and moderately wealthy households to start constructing latrines immediately;
- looking for external agencies to supply latrine construction materials (if there are no private producers);
- imposition of community penalties on those who continue to practise open defecation;
- discussing the subject in religious gatherings and community meetings;
- involving mothers to educate their children to stop open defecation.

3.5.3. INVOLVING THE HARD CORE POOR

As already mentioned, people's financial well-being has a significant influence over the type of plans adopted for constructing toilets. Those who can afford it start obtaining information on the availability of hardware, such as rings, slabs and pans, from outside sources, while those

who cannot afford it start planning homemade latrines, digging pits, using bamboo and wooden planks and other locally-available materials. It is amazing that 'no one during this planning process talks about subsidies unless some kind of subsidised programme is already being implemented'. It looks as – by avoiding to talking about subsidies – people consider the task as their own problem.

It is an important aspect to include the hard core poor and the landless. If landless people are grouped together in the community process, they usually complain bitterly that everybody blames them whenever somebody finds excreta on their land. 'In reality, they don't defecate on others' land but use the bush, forest or land around their workplaces, and feel great shame in using others' land for such purposes. They are very embarrassed by the allegation' [53]
If there are subsidies available already, it is important to target them to the hard core poor only, but where there are no subsidies. it has also happens that a new solidarity emerges, where rich people have provided land to the landless for latrines or latrines to the hard core poor. If the poor are not involved in total sanitation, even those who invest in a latrine do not benefit from an environment free of faeces. It makes sense for the better-off to also include the poor.[54]

But, even more so, it makes sense for the hard core poor to be included, as they suffer the most from diarrhoeal diseases. Hena, a very poor lady says: "Soon after we received orientation and sensitisation about the benefits of hygienic latrine use, I installed a latrine donated by the Union Parishad… I can now understand how much money and time we wasted against medication".[55]

It appears often that the hard core poor may have other priorities than sanitation, as their first worry is to get more food and a warm meal. In reality, the monetary costs and the lost working or school days due to diarrhoea affects them most. Sanitation and hygiene drastically reduces their vulnerability and this can lead to substantial improvements in health and direct poverty alleviation.

3.5.4. INVOLVING CHILDREN, IMAMS AND OTHER AGENTS OF CHANGE

Involving change agents is another important part of the equation: "Children are the most active in this process of change. It was found that even after the transect walk, procession and PRA exercises, children started digging holes for latrines and demolishing open defecation sites. This encourages the adults in the community to be proactive and responsive to the approach. The children organise routine village processions, collect base line information, show and flag defecation sites and disseminate information, especially to their friends. They influence their parents to build toilets."[56]

School programmes should therefore be an integral part of a sanitation campaign aimed at social change, and the involvement of teachers is obviously the first step. This requires public investments in school infrastructure, and if a school does not have a sufficient number of clean latrines, a sanitation strategy will fail. Moreover, such latrines must be maintained and must be clean. School latrines must be considered as pleasant places: In Peru, I was told that students are sent 'as a punishment' to the latrine, the most unpleasant and stinking place in the school. This is obviously not the desired kind of motivation for awareness creation, if one wants to promote sanitation.
Involving religious leaders can also have a very positive influence, especially if – as is the case in Bangladesh – Imams can be convinced to come on board. This is easy, insofar as the Quran makes cleanliness a precondition for any kind of prayer. "If someone is not clean, Allah will not accept his prayer". In addition, it had a great effect when people invited the Imam to visit them for social or religious functions, such as marriages or milad (religious gathering), and they did not accept the invitation if the family did not have a latrine.

Some Imams, or other people related to the mosque, are, at the same time, latrine producers: "Hannan Mia does two duties daily. He is an Imam of the local mosque and the producer of latrines in his village". In another case, the brother of the secretary of the mosque has a latrine production business. These linkages can mutually create synergies and reinforce hardware and software aspects of sanitation programmes.

3.5.5. SCALING UP WITHOUT SPOILING IT?

That total sanitation (100% coverage and no open defecation) can be achieved was proven by many agencies in Bangladesh, and in 2003, already over 100 villages had totally eradicated open defecation. At a pilot level, it was proved over and over that total sanitation can be achieved and that the social and economic instruments work: the toolbox for total sanitation is available. But is it possible to scale these experiences up to an entire country of over 140 million people? "A national strategy is needed to transform the small-scale success into national level achievements".[57]
The Government of Bangladesh has taken this challenge and formulated a National Sanitation Strategy [58]. This is quite an outstanding document, guided by the lessons

learned from many experiences. It has identified some very sound key principles to achieve the ambitious goal of total sanitation by 2010:

- Sanitation is a human right;
- Sanitation is primarily about health;
- Sanitation is also about privacy, dignity, safety and security;
- Creating and sustaining demand must go on;
- Hygiene promotion and behaviour change are important;
- Software financing is needed for scaling up, and for sustainability;
- Hardware subsidies should only be given for the poorest;
- Communities are central to the sanitation planning process;
- A gender-sensitive approach must be applied;
- Social, cultural and technical appropriateness must be observed.

This is a remarkable and promising paradigm shift, and it is hoped that Bangladesh will reach 100% sanitation by the year 2010. But it is a Herculean task, and requires a continued zeal and enthusiasm to keep the fire burning.

It is an integral part of the plan to involve government agencies, local government institutions, NGOs and civil society at all levels, and to delegate the ownership of the programme to the local community level. This is certainly a precondition for success.

But can the approach be scaled up without spoiling it? Is there a danger that the campaign can be politicised? The present government in Bangladesh seems to be fully-committed, but will the next government continue? Is there enough local leadership available? Is the capacity building sufficient to keep a social movement alive even if it becomes a daily routine of large bureaucratic structures? Nobody can say it. But one ray of hope is there: "Motivated people hardly ever go back to open defecation when the latrine pit is full, instead they take on the responsibility to upgrade their latrine"... and "The approach is sustainable if the community owns it." [59]

Total sanitation – political involvement for sanitation: A representative of the local government leads a rally to mobilise social action (upper left). Village women proudly show their plans for water and sanitation (upper right). A community organiser explains how sanitary latrines are replacing unhygienic ones in her village (below).

Total sanitation – a killing field transformed: A sanitary latrine now adorns the defecation field that was a source of disease (upper left). Women are applying for loans in the Grameen Bank office to construct a sanitary latrine (upper right). This grandfather proudly tells that his grand-daughter is now safe and will never suffer from the effects of open defecation; it is important to also get older people fully on board (below).

Total sanitation – making money helps: It is definitively easier to convince people to change their behaviour if there is some money in it. Private sanitation workshops have become an important rural industry (upper left). Significant technical improvement such as the plastic pan have made the products more acceptable (upper right). Cash from trash: composting can reduce garbage, a vexing urban sanitation problem, and turn it into fertiliser.

DEMAND-ORIENTED AND TOTAL SANITATION APPROACHES ELSEWHERE

4

4.1. TOTAL SANITATION IN WEST BENGAL

Starting in West Midnapore, in 1990, a widespread public education campaign was launched to change hearts and minds, through donors, local government, NGOs such as Ramakrishna Mission, and people working together. Basic hygiene messages were spread through schools and communities. At the same time an intensive latrine-building programme was started to meet the growing demand [60].

M.N. Roy, the Secretary, Ministry of Panchayat and Rural Development, Government of West Bengal explains the process: "We found that if you can explain the need, if you can allow people to innovate and to participate in their own way, and if we give them a choice, if we give them the right quality at the right price, there is a latent demand. Only it has to be brought to the surface through advocacy. We had hundreds of meetings at the village level and in schools; the initial days were very tough, because sanitation was not discussed in those days."
A key to the movement's growth is affordability. Toilets are now available for everyone at different prices. The poorest of the poor are partly subsidised by the government, and can buy a toilet for only 200 rupees, less than US$ 5 – about two and a half days' work on India's minimum wage. Producing them locally, in sanitary marts, also helps keep costs down. So far over 3.4 million household latrines have been installed, and the number is growing daily. Whereas West Bengal has a very liberal attitude towards development of various models of latrines, and the approach of self construction, it has not allowed a strong private sector to grow, and the 'Sanitary Marts' are mostly run by NGOs. Nevertheless, production has grown significantly and West Bengal has already reached the Millennium Development Goal of halving the number of people without access to sanitation.
Dr. Surjya Kanta Mishra, Minister-in-Charge, Departments of Health & Family Welfare, Panchyat and Rural Development, Government of West Bengal states: "It seemed unimaginable to construct more than a million latrines a year in rural areas. That we have achieved now. We want to step it up to 1.5 million and want to have total sanitation achieved in the state by the next three years or so."
The movement is now spreading across the rest of India. Dr. Roy believes that what has been achieved in West Bengal would be easy to replicate in many other countries. "Select an area, have extensive education, add an orientation on hygiene and education, develop the delivery system, involve the people, help them to manage it, we are only facilitating from outside. This is the model accepted and because of this for the country as a whole there's been a massive improvement in the delivery of sanitation programme."

These achievements are basically due to the paradigm change towards demand orientation. and through massive investments in social mobilisation. However, it needs a political commitment from the very top layer of the government, and then still very dedicated civil servants. who apply the principles. not only as a duty with their heads, but also with their heart.

4.2. THE MANTRA PROJECT OF GRAM VIKAS IN ORISSA (INDIA)

"Our village is better than the town. We have constant (24 hours a day, 7 days a week) piped water supplies to all families, without exception. Every family has its own toilet and bathing room as well. When we seek marriage alliances, our daughters ask us – 'would there be similar facilities there as well?'" Lalita Malik of Tamana village in Ganjam district. excitedly shared this, when asked what changes they see in their lives in recent years.

26,850 families across 361 villages in Orissa today echo similar sentiments. These are people, who have participated and, subsequently, taken ownership of, the water and sanitation programme promoted by Gram Vikas. Gram Vikas is a rural development organization working with poor and marginalised communities of Orissa since 1979. MANTRA (Movement and Action Network for Transformation in Rural Areas) is the overarching framework of Gram Vikas' habitat development initiatives [61]. Its founder and Executive Director, Joe Madiath, has become a well-known advocate of the poor, and feels at ease among marginal tribal families in remote districts of Orissa, as well as among the participants of the World Economic Forum in Davos, where he is invited by the Schwab Foundation as "Outstanding Social Entrepreneur".

In the early 1990s, Gram Vikas conducted studies and found that over 80% of the cases of morbidity and mortality in rural Orissa could be traced to poor quality of drinking water, which was, to a great extent, as a consequence of the callous attitude towards human waste

Total Sanitation in West Bengal 1: The State of West Bengal has come a long way with total sanitation, mainly due to the political will of the Government of West Bengal to achieve total sanitation as part of the Millennium Development Goals. The leader of the Gram Panchayat (upper left) is proud that his union has achieved 100% total sanitation, that diarrhoeal diseases have decreased by 90% and child mortality by 50%. To involve children and teachers is an important element of the strategy: Every school has latrines for teachers and children (upper right) and many children can recite poems and songs on hygiene and sanitation.

Total Sanitation West Bengal 2: The sanitation strategy in West Bengal emphasises the software (promotion of hygiene, motivating village leaders) and market based sanitation approaches. Subsidies are only foreseen for the poorest people; those who can pay have a broad range of products available. However the private sector is not allowed as a business: the sanitary marts are run by NGOs, mainly the Ramakrishna Mission (upper left and below). Ms. Sumita Bagchi is in-charge of total sanitation at the local Government of the Haldia district and has mobilised a remarkable amount of political determination and people's participation.

disposal. Human waste, in its raw form, found its way into the same water bodies that people depend upon.

In the absence of proper mechanisms for sanitation, women have to bear the terrible indignity of defecating in the open. In order to achieve some level of privacy, women rise before dawn, and have to endure the humiliation of searching for discreet locations to defecate.

Women spend a better part of their day fetching water for household needs. This drudgery is more acute during summers, when women have to spend hours together, traversing nearly four to five kilometers to fetch water. In most villages, the women would also take their girl children along with them, to fetch that extra little water the girls could carry. This meant that sending girls to school was given lower priority, and, as a result, attendance figures for girl children were abysmal.

In the absence of a protected enclosure where women could take a bath, they are forced to bathe in the common village pond. In these ponds, due to the presence of men on the other side, women are mostly forced to resort to only insufficient cleaning of their bodies. Moreover, in summer, communal bathing in turbid waters of a shallow pond was an instant recipe for the spread of skin diseases.

Gram Vikas realised that water and sanitation might be the only way where an entire community could come together to have their first experiential lesson of inclusion. What was important was coming up with a win-win solution for all of the stakeholders in the village.

In MANTRA, every household in the village constructs, for itself, a toilet and bathing room, with 24-hour piped water supply to both the toilet and bathing room, as well as to the kitchen of the house. The water is supplied from an overhead water tank constructed on the basis of estimates of per capita consumption of water (of 40 litres per day), projected for a population twenty years hence. This is done so that every household can have 24-hour running water supply on tap.

Gram Vikas believes that as primary beneficiaries, people must pay for their own development. People contribute at least 60% of the costs of toilets and bathing rooms (costing a total of Rs. 9000, or around 225 US$) and up to 30% of the cost of establishing a water supply system. The idea is to make people contribute substantially, since that is critical in bringing a strong sense of ownership for the assets created. People construct their own toilets and bathing rooms.
Gram Vikas also believes that the poor can and will pay for their development. Joe Madiath says: "We strongly contend the attitude of political patronage and the bureaucratic concessions that normally accompany the provision of any service for the rural poor and the marginalised. However, we also feel that the rural poor must have access to services fulfilling their basic needs as a matter of right, and not due to any form of patronage dispensation. To put the issue in perspective, it is pertinent to remind ourselves that in urban areas, one is witness to enormous subsidies granted to people, in facilities that range from electricity connections, drainage and sewerage, to education. For example, urban consumers are charged anything ranging from 3% to 12% of total costs incurred on maintaining the water supply system in cities. Compare this with villages that have implemented their own systems, where people would be paying for the complete maintenance of such facilities after the initial installation."

The happy owner of a toilet with bathing room in a village of Orissa where all inhabitants have constant access to piped water and heavy fines are to be paid for open defecation.

4.3. THE EXPERIENCE OF INTERNATIONAL DEVELOPMENT ENTERPRISES (IDE) IN VIETNAM

Even with relatively modest investments in rural areas, demand-oriented strategies can work wonders. In recent years, Vietnam has made enormous progress in improving its water and sanitation infrastructure. However, the use of sanitary latrines remains low. The availability of water supply has progressed far faster than sanitation,

and the number of households with access to water was almost twice that of those with access to hygienic latrines. In addition, the progress achieved in water supply and sanitation has disproportionately benefited the wealthier segments of the population, and has been less favourable to the poorest segments, including ethnic minorities.

In two Vietnam provinces, International Development Enterprises (IDE) developed a range of low-cost sanitation options, and stimulated a network of local masons to market and deliver them to the rural population. As a result, the sanitation access rate increased markedly in these areas, even among the poor.

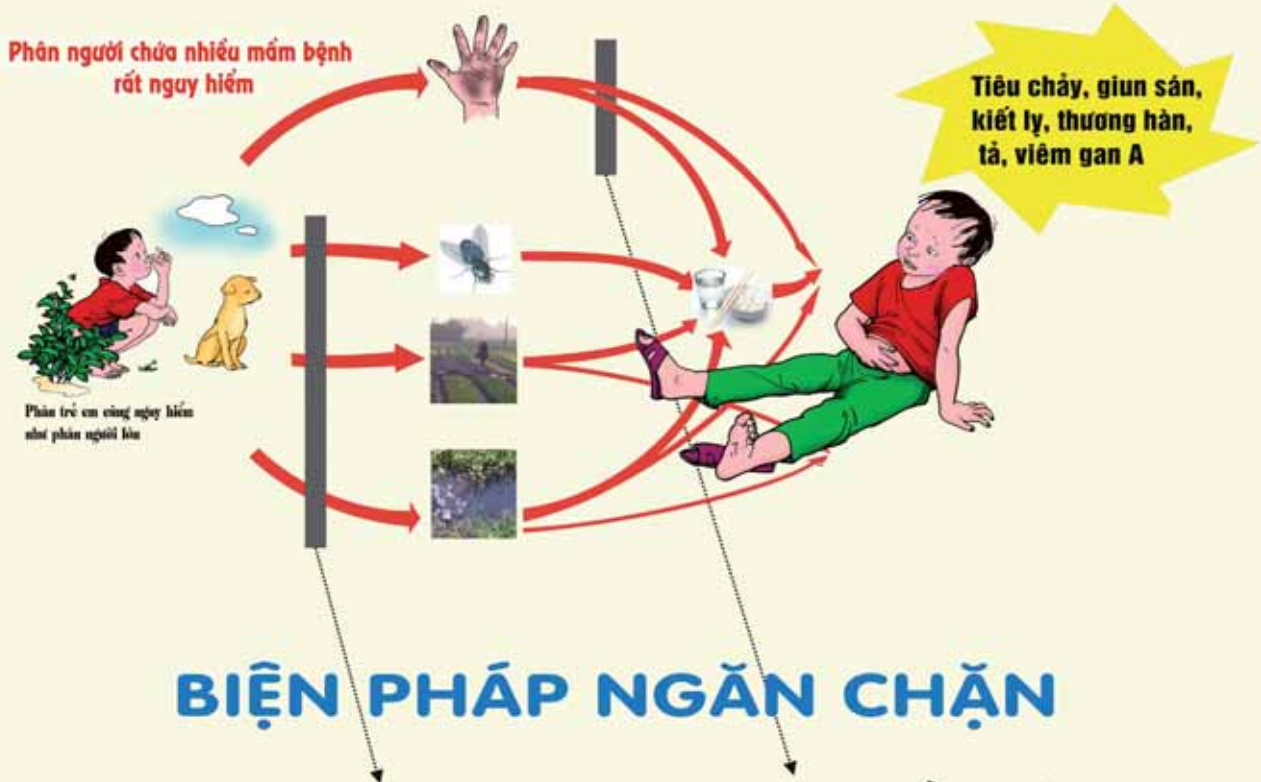
From September 2003 to June 2006, IDE implemented a rural marketing pilot project targeting about 54,000 households in the provinces of Thanh Hoa and Quang Nam on Vietnam's central coast. The project aimed to examine two questions: **(a)** whether rural families will invest in latrines when a range of low-cost models are available from local private sector suppliers; and **(b)** to what extent targeted promotional campaigns can influence consumers' decisions to invest in sanitation facilities, and change sanitation practices.

By the end of June 2006, more than 16,000 investments in latrines were made in the experimental project areas. Using the December 2002 access rate as the base line, communities in the experiment group achieved almost 200% increase in the rate of household access by June 2006, whereas the control group achieved only a 74.8% increase. According to the government's criteria, nearly one-fifth of the households in the two provinces are categorised as 'poor' and thus receive social assistance.

Unlike the conventional approach normally applied in Vietnam, the pilot approach was fully market-driven, offering customers no capital cost subsidies and using no external resources to catalyse market-based improvements in sanitation services and promotion of improved hygiene behaviours. In brief, the IDE approach focused on stimulating weak rural sanitation markets and helping these markets to become viable. Emerging evidence from Vietnam suggests that by utilising a market-based approach, it is possible to accelerate access to sanitation among underserved rural populations, enhance the sustainability of sanitation services, and deliver these services more efficiently, compared to a non-market based approach.

The experience of IDE highlights the importance of not underestimating a population's willingness to pay for sanitation, provided that quality products and services are offered, and their usefulness is effectively communicated.

CÁC ĐƯỜNG TRUYỀN BỆNH TỪ PHÂN ĐẾN CƠ THỂ NGƯỜI



BIỆN PHÁP NGĂN CHẶN

XÂY DỰNG VÀ BẢO QUẢN NHÀ XÍ HỢP VỆ SINH

Mỗi gia đình cần chọn và xây 1 loại nhà xí phù hợp

Nhà xí chỉ được coi là hợp vệ sinh khi bạn biết bảo quản và giữ gìn

RỬA TAY BẰNG NƯỚC SẠCH VÀ XÀ PHÒNG

Rửa tay sau khi tiếp súc với phân, trước khi ăn, chế biến thức ăn và cho con ăn

Cọ tay ít nhất 3 lần và lau tay khô bằng khăn sạch

Sanitation in Vietnam 1: Demand-driven approaches work very well in Vietnam where the main motive to acquire a latrine is prestige, followed by comfort and privacy. The two ladies (above) have invested between 65 and 120 US dollars for a latrine with a bathroom for showers. The man (below) is handicapped with polio and can hardly move; he is now building a latrine with shower room and is very proud to offer such comfort to his family. He earns some money from his small bicycle repair shop.

Sanitation in Vietnam 2: These masons are important actors in the sanitation scene. They were trained by International Development Enterprises (IDE) to build suitable and low-cost models according to the needs and desires of the customers. Very often, the motivation to build a latrine was closely linked to the dream of every poor family to have a nice and better house. Latrines must, however, compete with the desires for television and karaoke sets that are very high on the agenda of priorities as well.

4.4. THE SANITATION MIRACLE IN ETHIOPIA

The Southern Region in Ethiopia, where 20% of the country's population reside in 10% of a geographic area known for its high population density and ethnic diversity, another sanitation success story is taking place: "This sanitation story is distinctive because it was successfully driven by the Health Bureau (working closely with all share-holders), using their own funds, through a cascading process of advocacy, consensus, and capacity building, promotion (via community volunteers), and supportive supervision. Along with other gains in public health, pit latrine ownership rose from under 13% in September 2003, to over 50% in August 2004. By August 2005, it had reached 78% and a year later, was on track to reach 88%." [62]

Shame – a key driver

Dr. Shiferaw, head of the Health Bureau of Southern Region, explained that during the cascading advocacy and consensus building process, a zonal administrator was asked if he would stay in a village overnight. His hosts were embarrassed when the administrator asked, "but what happens if I need a latrine?" The zonal administrator noted and reported on the obvious shame his question had caused and how rapidly consensus was reached on the need for latrine construction. He was later gratified to be invited a second time by the same village, but this time without the faintest hint of embarrassment as the whole village had built latrines.

Dr. Shiferaw added that shame over the prevailing sanitation situation, and dismay at the poor progress of programmes and projects to effect change, had been important drivers of change both within his department and the regional cabinet.

What was responsible for this success? Certainly, it is the result of a dedicated group of government officials in the Health Bureau that could mobilise people and motivate everybody to take the problem into their hands. The determining factors are listed as follows:

1. "Leadership: Throughout the health hierarchy in Ethiopia, there is no shortage of inspired, well-informed and committed leadership, but in Southern Region there has been an exceptional willingness to take risks and challenge conventional primary health care approaches. This had included making a modest, but dedicated, sum of money available for the mass mobilisation of the entire population as sanitation stakeholders, under the slogan: "Sanitation is Everyone's Problem and Everyone's Responsibility".

2. Affordable products: The Southern Regional Health Bureau has applied some of the key guiding principles of the highly-acclaimed Community-Led Total Sanitation (CLTS) approach – that of zero subsidies – but allowed the community to come up with its own innovative and affordable models. The CLTS approach has contributed to a similar dramatic latrine coverage improvement in South Asia.

3. Latent demand: In the limited Knowledge, Attitude, Belief and Practice studies carried out in Ethiopia, women expressed demand for a safe, private, hygienic, smell-free latrine, while men acknowledged the importance of a latrine, particularly during the rainy season. However, latrine construction has not generally been prioritised. In Southern Region, women volunteer community health promoters have became the influential, early adopters supported by leaders at all levels.

4. The right context: Traditional sanitation wisdom suggests that where houses are scattered, and there is a wide choice of rocks, bushes, trees and gullies to provide privacy, then demand for latrines is limited. In Southern Region, population expansion, resulting in high household density, and deforestation have combined to reduce private open defecation options. In addition, girl-child school enrolment in, and completion of, primary and secondary schools is significantly above the national average. The Health Bureau leadership suggest that women in Southern Region have been better able to express their sanitation priorities and influence their husbands. An additional important contextual factor has been the long-term partnership with John Snow International, through the USAID-funded project, Essential Services for Health in Ethiopia. This partnership gave greater emphasis to 'high-impact' public health programmes and sponsored the training of community health promoters, who not only led by positive example, but also went door-to-door, to successfully persuade households to follow suit. The pilot demonstrated what could be achieved; it was now up to the regional government to scale it up.

5. The tipping point: Referring to the prevailing health situation prior to 2004, Dr. Shiferaw described a phenomenon known as the 'leaking bucket' effect: "The rural people get sick, they are treated and leave, then they get sick again, are treated again... and the cycle continues. They spend most of their cash income on health care." With support from John Snow International, the regional health leadership was starting to recognise the value of improving prevention, but the actual trigger for change came from an unlikely source. It was one of the Bureau drivers who overheard a senior health manager state that 80% of the disease burden in the region could be prevented. The driver remarked that the same assertion

A typical house with a typical family

Dr. Shiferaw, the spirit behind the whole process

The "software" can make all the difference: a health extension worker visits each household and then works with the women.

And even children get involved: this child seems to be more interested in her food than in the health extension manual, but the women are very curious (photos above).

had been repeated for the last ten years and, with a mixture of guile and ill-concealed scepticism, suggested that surely after a decade some of the diseases might actually have been prevented!

This story illustrates another important factor in the success story – that of the willingness of senior management to listen to the people, and to put the people first" [63].

4.5. HOW TO ADAPT SOCIAL PRESSURE TO DIFFERENT CULTURAL CONTEXTS: THE CASE OF ROBIDOG

Joseph Rosenast of Thun, Switzerland, the inventor of Robidog, has made it: together with Dr. Georg Wander and son Albert (Ovaltine), Theodor Tobler (Toblerone) and Ursula Andress (James Bond) he is now shown in the 'Museum of History' as one of 100 pioneers from the Canton of Berne who became famous at a global, or at least European, scale. Robidog is not only a good idea; it is also implemented with an excellent marketing strategy.

Robidog is a simple metal box with two functions [64]:

1. It is a dispenser of small plastic bags to collect dog excreta. Every owner of a dog is obliged to collect the excreta of his/her dog and dispose of them safely.
2. The same box is thus also a garbage box where the bags can be deposited.

Robidog's brand label

Joseph Rosenast is a carpenter who loves dogs, and he invented this system during a holiday in Italy, where he found people hostile to dogs because of the excreta they produced everywhere in the streets. In 1980, he filed a first patent for his system that is now very common in most communes in Switzerland, where over 1,700 communes have installed 40,000 Robidog boxes. The system has also become an export product and is used in many European countries, Germany, France, Sweden, Finland, Austria, Portugal and many more.

The problem is not a small one: In the city of Paris, every day 25 tons of dog excreta are disposed of in the city, and it is quite a headache to clean it up. But even the most fervent admirers of Paris will get upset if they encounter dog excreta every second step they take.

The city of Zürich has installed 370 Robidog boxes, uses 2 million bags and collects 230 tons of dog excreta per annum that would otherwise remain in the open.

Now, what makes Robidog such a clever invention? We will explain it here, with the 5 Ps:

1. Product: The product is very suitable, as it is both a dispenser and a collector. The boxes are sturdy, and can be left out in the streets. The dispenser provides plastic bags on a self-service basis.

2. Price: The cost of the system (mostly for the free bags) is about 25 Swiss Francs per year per dog owner, and the communes pay for this. The installation cost is 600 Swiss Francs for one box. These costs are financed out of the dog taxes of around 100 Swiss Francs per year. There is, however, another notion to price: if a dog owner does not collect the excreta of his dog, he can be fined. The risk of being fined is low, but we will see below how social pressure works.

3. Place: This is probably the most striking part: the crucial incentive for the dog owner to use these bags is the availability of bags everywhere dogs are walked. The number of boxes is as relevant as dispensers; many dog owners take a number of bags from the dispenser and take them with them. When the dog does his 'business', the excreta can be collected and disposed of in any garbage container. But without these dispensers at crucial places, it would be much more difficult to implement 'total dog sanitation'.

4. Promotion: The system was promoted with many letters to the communes, and once a critical mass was there, every commune wanted to have the system, often on the demand of the people, and even dog owners who wanted to maintain a good relationship with their neighbours.

5. People: What is, however, very interesting is the social pressure, and how it works in a country like Switzerland, with remarkable differences between the French speaking and the German speaking parts. Especially in the latter, there is quite a high social pressure from neighbours

Total Sanitation for dogs: Robidog is a patented system for the collection of dog excreta originally developed in Switzerland but now widely used in different countries in Europe. The Robidog box is at the same time a dispenser of free plastic bags for collecting dog excreta and a garbage container where the bags can be disposed of. An intelligent marketing strategy has made a fast spreading success story out of this system. In Switzerland alone, over 40,000 Robidog boxes are installed in 1,700 communes.

and the public for dog owners to collect the dog excreta. I have a dog myself (writes one of the authors), and since my neighbour told me that she had seen someone who did not collect their dog's excreta, I know that I am observed and would lose my reputation if I don't collect the dog excreta. So, the rules are more imposed by social pressure than by the police and the fines. But it is, of course, important that it is forbidden to leave dog excreta on the streets. Interestingly, awareness and public pressure is much lower in the French-speaking part of Switzerland, where dog excreta are more often left on the streets.

Robidog is an example of how similar marketing strategies with all the 5 Ps work in quite different contexts. While it would be unthinkable to have a similar type of social pressure as in Bangladesh's Total Sanitation, somewhat principles can work if properly adapted to other cultures.

4.6. SOME PRE-CONDITIONS FOR TOTAL SANITATION TO SPREAD TO OTHER COUNTRIES?

Total sanitation has become an attractive strategy in many regions of the world, and presently there are several campaigns being implemented in different states in India, in Cambodia, China, Indonesia, Nepal and many other countries. In most regions the basic model seems to work, and social mobilisation is possible with the toolbox made available. What is decisive here is political will, and the determination and the enthusiasm of charismatic leaders in government, multi-lateral agencies and NGOs.

However, it is often overlooked that demand orientation alone is not sufficient, and people tend to neglect or ignore the bases that were laid in Bangladesh before the total sanitation campaign was started. This bases namely:

1. Product development: R&D efforts to make affordable and suitable technical solutions available. Inventions such as the plastic pan or a wide range of cheap options developed in Bangladesh should not only be copied, but need to be adapted to the local environment;
2. Private sector: The non-existence of a dynamic private sector can be a bottleneck that can only gradually be overcome: masons need to be trained, small production centres may emerge, but only if there is a local market;
3. Market creation: Very often, lack of demand is also a supply problem: Only one model of latrine is available or promoted by development agencies. The market is narrow, and therefore, no efficient production is possible, or there are only a few suppliers and no competition;
4. Pricing: Hardware is not affordable: this is by far not a detail but the key to success: it makes an enormous difference if latrines are available at US$ 2 or if the latrine costs US$ 70 or more.

All these steps for laying the foundation for a successful sanitation strategy may be overlooked if people are only impressed by the miraculous software dimension of total sanitation. Sure, this software is fantastic, but without the hardware, it will not work, or only work very slowly.

PART TWO: METHODOLOGICAL SUPPORT FOR THE 5 Ps OF MARKET DEVELOPMENT

A methodological contribution by Jaime Frias, former director of IDE (International Development Enterprises), Vietnam

METHODOLOGICAL SUPPORT – INTRODUCTION

5

5.1. WHY IS MARKETING IMPORTANT IN SANITATION

Most rural markets for sanitation do not exist, they have to be created. Sanitation options targeted to the poor need to be priced low, in order to sell. Most low-cost sanitation facilities are designed around generic components and parts. Most of the time, individuals practising unsafe disposal of human excreta do not internalise the benefits of stopping open defecation. An external catalyst is required to fill the initial investment gap to develop sanitation markets, provided that ongoing profit margins are sufficient for local providers and retailers to operate in a sustainable way.

A diagnostic study of the sanitation market is necessary to understand why the sanitation market fails to deliver the type of products that people want, and why the target group gives higher priority to expenditures other than sanitation. The diagnostics will guide formulation of market strategies that are responsive and specific to local constraints. This issue of market failure could be seen as weak sanitation supply, a weak sanitation demand, a poor enabling environment, or a combination of these.

«Why we need to focus on market development drivers?»

Underdeveloped markets remain in a latent state because of market imperfections. In Vietnam, a sanitation market failed to develop for the poor because private agents were not capable of internalising profit gains from initial development investments. These imperfections are often referred to as learning and innovation externalities.

Market constraints can also come from lack of land tenure. Lack of property rights discourage household willingness to invest in sanitation, Development drivers can be seen as *actionable levers* that respond to these market failures. When policy makers and development practitioners are able to identify and intervene these levers they will remove the barriers that constraint growth of sanitation markets for the poor.

Strategies to develop markets can be seen as **development drivers**. These strategies may include improvement of on-site sanitation options, increased demand for improved sanitation, or a better operating environment for service providers. The proposed methodological support of the 5 Ps should help marketers to identify, intervene and measure actionable market *development drivers*.

The purpose of this section is to visualise activities of methodological support for the 5 Ps in the context of the marketing process, and to understand the logic behind the proposed sequential steps within each of the four areas of methodological support for the 5 Ps. We have assumed that most development practitioners work in project schemes.

5.2. PROCESS ORIENTED MARKETING AND THE PROJECT LIFE-CYCLE

We have stated earlier that methodological support helps marketers to identify, intervene and measure **drivers of sanitation market development**. For simplicity, we will divide the marketing process into three sequential stages:

1. development of the marketing plan;
2. marketing execution and
3. performance measurements.

This proposed sequential approach allows marketers to design activities that are context responsive.

Most marketing programmes are preceded by (business) project evaluation and a **marketing plan**. The marketing plan normally, in a business context, is a component of the business plan. Marketers must undertake several activities that lead to the final business plan, including technical evaluation. It is worth clarifying that this publication will not describe the process of project evaluation, business plans, nor marketing plans. This publication will provide a guiding framework, described under a process scheme that contains four key activities of methodological support, developing markets of low-cost sanitation.

It is useful to refer to some of the activities normally undertaken by marketers of sanitation during the planning phase. Marketers **must understand first the factors that govern consumer behaviour and supply systems of sanitation** so that they can develop the market, through activities that effectively respond to the existing initial conditions. Planning helps marketers to systematically define success parameters of the intervention that will follow.

During the planning phase, marketers identify levers, in the form of constraints and opportunities, that are later used as strategies for developing markets.

Most marketing plans start with **situation analysis** (an assessment or diagnosis of the existing situation). During situation analysis, marketers gather information about the consumer, the performance of the product, the sanitation industry and the level of competition of existing providers of sanitation. For example, in Vietnam initial assessments revealed that non-adopters had a biased perception of the costs of sanitation. Because they believed costs of latrines were substantially higher, demand was constrained. In addition, the initial diagnosis revealed that the majority of the village masons were incapable of accurately estimating costs of materials or construction of affordable pour flush latrines.

These analyses lead to the formulation of strategies for demand promotion that focus on the provision of basic market signals, such as prices and latrine features. The situation analysis is also critical to define objectives that are measurable and realistic. In Vietnam, for example, the initial assessments revealed that less than one-fifth of households had hygienic latrines. The project deemed it realistic to double access to sanitation during the first year.

Marketing Strategies serve as the fundamental underpinning of marketing plans. Strategies describe the roadmap, one among several options, or pathways, for marketers of sanitation to achieve their goals.

Objective definition for sanitation improvement usually entails developing measurements and benchmarks for sanitation market growth: the rate of sanitation per household, adoption rates of sanitation, non-adopter awareness of basic features of sanitation, including prices and benefits of latrines.

Execution of market improvements: Even the best marketing strategies are worthless if they are poorly executed. In the case of sanitation, market improvements should be delivered through the appropriate channels and be aimed at addressing market constraints. Local service providers include public, social and private agents, such as health organisations, farmers' cooperatives, women's groups, religious institutions and the private sector. In the case of Vietnam, women's groups organised village meetings and the local women's cadre performed household follow-up visits to non-adopters. They set in motion savings schemes. The district health educator introduced the village masons. Involvement of local technical actors, such as universities, should also improve outcomes. The Hanoi University of Civil Engineering participated in the process of local adaptation of sanitation technology.

Performance measurement should be independent, to avoid conflicts of interest and to increase accountability of the implementing agency. Close monitoring is normally essential at the beginning of the marketing project and should be extended to communication goals, enhanced coverage of available sanitation services and improved quality. Performance measurements are crucial to assess the impact, effectiveness, efficiency and sustainability of marketing programmes against their initial objectives.

Table 1 below provides an overview of the marketing process in the context of the four key areas of methodological support. In this table, sanitation marketing is presented as a sequential process, comprised by three stages:

- Development of the marketing plan,
- marketing execution, and
- performance measurement.

These three stages are linked to four areas of methodological support: **1.** Market research, **2.** Development of technical solutions and product range, **3.** Supply chain development, and **4.** Development of promotion and communication strategies.

These four areas of methodological support will be further described in the next section.
The marketing process is iterative. That is, marketing fits into a cycle that iterates based on the changing consumer needs, the changing operating environment, the lessons learnt from ongoing implementation and the need for other type of adjustments, such as regulation. These activities of methodological support need not be carried out in any particular order, we suggest that 'market research' and 'development of technical solutions and product range' precede 'supply chain development' and 'development of communication and promotion strategies'. These last two items depend, to a great extent, on the outcomes of the first two.

Table 1: Overview of the marketing process Methodological Support

Project Life-Cycle	**1.** Market research	**2.** Development of Technical Solutions & Product Range	**3.** Supply Chain Development	**4.** Development of Promotion and Communication Strategies
1. Development of the marketing plan • Initial Situation Assessments & Diagnosis • Formulation of Marketing Objectives and Strategies	Perform analytical diagnosis • Segmentation & targeting • Positioning **1.** Identify a sanitation market niche	**2.** (Identify a sanitation market niche) **3.** Select promising sanitation technologies that have the potential to fill that niche **4.** Market test prototypes of sanitation solutions **5.** Undergo engineering improvements to improve the sanitation value proposition 6. Perform product costing and rate of return projections	**1.** Situation analysis (Identify constraints and opportunities of existing providers of sanitation) **2.** Formulation of strategies for supply chain development	**1.** Define the target group and audience **2.** Identify exposure patterns of the target group **3.** Identify determinants of demand **4.** Formulate a communication concept **5.** Pre-test the potential effectiveness of the formulated concept **6.** Develop a creative process to turn the pre-tested concept into an executable idea **7.** Pre-test the potential effectiveness of the executable idea
2. marketing execution		**7.** Launch (pilot project)	**3.** Development of the provider network of sanitation	**8.** Produce, distribute, deploy and execute communication and promotional activities
3. Performance measurements			**4.** Measure performance of the providers' network	**9.** Measure performance of communication and promotion strategies

FOUR KEY AREAS OF METHODOLOGICAL SUPPORT

6

6.1. MARKET RESEARCH

Without profound insights into the customer's desires and dreams, it is impossible to develop suitable product ranges, pricing systems and to design the software elements of a communication campaign. A thorough market research in different market segments is a indispensable.

Good marketing research methods are those that transform data into useful information. During the market research process, practitioners gather, record and analyse data about non-adopters, and the sanitation market, to make informed programmatic decisions.

The purpose of market research is to help marketers to make informed decisions about development and marketing of sanitation. Market research is used to validate the relevancy of targeting segments, such as women, men and children, to identify market niches, such as the compost users, to assess the relevance of the existing range of technology, and to understand the level of competition of providers in the market. In a nutshell, it helps marketers to define the *marketing mix* – the optimal combination of the 5 Ps – in terms of what is going to be offered, to whom it is going to be offered, why will it be offered, how will it be made available to the consumer, and what is appropriate for consumers to pay for sanitation.

Market research precedes the marketing plan. Market research includes consumer segmentation, positioning, and competition analysis. We will provide description of these analyses later.

Market research is also employed to understand market segments, the total market potential for sanitation products, and services, the trends and seasonality of the market, the different categories of technology, and the level of demand for sanitation. Market research allows marketers to understand seasonality that governs construction and installation patterns of sanitation. Seasonality may include climatic factors as well as cultural factors, such as local beliefs and festivities.

6.1.1. SEGMENTATION AND TARGETING

Segmentation and targeting are two key elements of marketing sanitation. Segmentation relies on the division of the market or population into subgroups, with similar motivations to adopt sanitation. Sanitation frameworks normally provide the basis for analysing decision-making on domestic durable goods, responsibility for saving for durable goods, and looking after health concerns – all these are different levels of benefits of sanitation.

Usage patterns are often the starting point for market segmentation, as they determine the intended change in current behaviour. In the field of sanitation, three groups of households can be distinguished in relation to their existing usage patterns of sanitation (behavioural segmentation):

i) Non-adopters (open defecators),
ii) Owners (and users) of unimproved systems, and
iii) Sharers or users of unimproved systems (normally public facilities).

(The fourth group is owners of improved systems)

These groups are distinguishable in terms of their behavioural patterns and their preferences for improved dry systems and improved waterborne systems. Determinants of consumers' preferences include: attitudes towards sanitation, access to water sources and income levels.
Segmentation increases the effectiveness and efficiency of marketing, as strategic concepts and promotion of informed choice can be formulated for and tailored to these specific groups. Priority should be given to these groups, as they represent the greatest impact on project objectives. It is worth noting that the distinction among these three groups, and the fact that marketing aims to encourage adoption of improved sanitation, does not necessarily mean that owners of unimproved systems or users of unimproved public facilities are sustaining unhygienic practices. The selection of these groups follows a marketing rationale whereby formulation of strategy responds to the specific characteristics of these groups.

A behavioural framework for designing marketing programmes, developed by Jenkins and Scott [65] (2006), proposes segmentation of the population according to their sanitation adoption stage. This framework places an increased emphasis on the decision-making process of the household, leading to a final choice to adopt a sanitation change. This framework can be extremely useful to segment the sanitation market when performance measurements are needed, predictions of changes in demand for household sanitation improvements need to be made, or strategies for stimulating new demand need to respond to the household decision stage. Other

factors, such as geographical location, attitudes and life-styles, can be used to make the usage-based approach and the behavioural framework even more actionable.

6.1.2. POSITIONING

Positioning is a process in which sanitation marketers place perception elements in relation to sanitation, its usage, adoption and related behaviour, within the minds of the target group. Marketing will focus on switching households from open defecation and usage of unimproved systems, to adoption of improved systems. One convenient way to think about positioning as the central concept of the communication strategy is the four key elements of improved sanitation facilities:

- Water safe systems (facilities that do not contaminate water bodies),
- Human safe systems (facilities that prevent contact be-tween human and excreta),
- Confined systems (facilities that confine excreta, to prevent exposure to vectors) and
- Odourless systems (facilities that prevent odour emissions)

Positioning implies choosing a specific spot within the target group's perception map to build the benefits of improved sanitation. By choosing to promote the benefits of improved sanitation, the strategy avoids prescribing a particular technology. Instead, positioning promotes informed choice and aims to increase the perceived value of improved sanitation features that normally are neither obvious nor relevant to the target groups. The benefits of improved sanitation are associated with observable features of sanitation systems, such as vent-pipes, lined pits and impermeable slabs. Because of the explicit link to observables, the target group will be able to relate the benefits of improved sanitation to those features that have the greatest health return on investment.

The final choice of benefits to be promoted, however, will be made through consumer research and concept testing. Experience from other countries suggests that emotional benefits such as social status and prestige prevail over the rational ones, such as prevention of diarrhoea. Hence, exhaustive analyses about the potential validity of the chosen strategic benefits should be further explored. The four concepts of improved sanitation will illustrate informed choice and available options.

In Vietnam, sanitation was position as an enabler of social status. As opposed to relating sanitation with the fear of disease, marketers made latrines a social aspiration of civilised and conscious community members.

6.1.3. STEPS IN MARKET RESEARCH

Market research often progresses from an extensive review of existing information related to sanitation, to exploratory inquiry to descriptive techniques to causal statements. This section aims not to provide a thorough description of market research methods or techniques. Instead, we will describe a step-by-step guide to help marketers of sanitation embark on market research.

The process of market research for sanitation entails: defining the problem, establishing the research designs, collecting and analysing data and formulating findings. Market research can be seen to run parallel to the sanitation product cycle:

Exploratory inquiry is used widely for product development of technical solutions and product range, as well as for developing effective communication and promotion strategies. Each of these processes is described in further detail as separate sections, and entails three steps in sanitation marketing:

1. Understanding non-adopters;
2. Understanding the sanitation adoption cycle;
3. Understanding the sanitation market.

These three steps are summarised in Table 2.

It is assumed that the reader is familiar with some of the definitions from the table.

The research methods proposed in Table 2, namely focus group interviews, one-on-one, in-depth interviews, structured observation, intercept walks, key informant interviews and quantitative surveys are sufficiently standard to not require a detailed description here.

The choice of primary or secondary sources of data will depend on the availability of information. Secondary data sources are those data that already exist. We recommend to sanitation practitioners that they make an extensive review of secondary data prior to embarking on primary data collection. In order to avoid unnecessary overlaps. In addition. Good secondary data can inform primary data collection. Primary data sources are better tailored to addressing the specific issues of the particular sanitation marketing project.

We will provide a brief description of each of these steps as follows.

Table 2: The three steps in sanitation marketing

Steps in sanitation marketing	Brief description	Likely Information source	Type of research	Common methods	Subject of study
Understanding non-adopters	• Sanitation habits and hygiene practices • Attitudes towards sanitation • Knowledge and hygiene education	Secondary sources Primary research information	Qualitative research Quantitative research	Focus Group Interviews One on one in-depth interviews Structured observation Intercept walks Surveys	Household members (Males and females)
Understanding the sanitation adoption cycle	• The way sanitation is adopted • When sanitation is adopted	Primary research information	Qualitative research	Focus Group Interviews One-on-one in-depth interviews Structured observation	Household members Private agents (service providers)
Understanding the sanitation market (Market assessments)	• Sanitation technology innovation gaps • What prevents the market to work • What opportunities exist to further develop the market	Primary research information	Qualitative research Quantitative research	Key informant interviews Surveys Field visits Focus Group Interviews	Household members Private agents (service providers and supplier of spare parts) Local leaders (government and community)

1. Understanding non-adopters:

Non-adopters have their own point of view regarding sanitation and hygiene practices. Their point of view clearly differs from the normative point of view that sanitation should be adopted. It is the role of the marketer to understand this gap. We propose the following critical points of non-adopter understanding:

- **Sanitation habits and hygiene practices:** Understanding what non-adopters are doing today is essential. Non-adopters' open defecation, unsafe disposal of excreta and unsafe food manipulation are risky behaviours that negatively affect their health. Marketers should consider these behaviours as part of the baseline against which performance of the initiative will be measured.

- **Attitudes towards sanitation knowledge and hygiene education:** Non-adopters' existing behaviour is explained by their attitudes and knowledge towards sanitation and hygiene. Marketers should recognise that they will not affect non-adopters' behaviour directly. Marketing activities will actually affect the way non-adopters perceive sanitation in relation to other things that are important to them.

A useful framework to guide marketing thinking is to think what non-adopters are doing today. Why are they doing this? How do they think today? What do you want them to think tomorrow? What do you want them to do tomorrow? (tomorrow refers to the post-marketing exposure state)

Today	→	Tomorrow
1) What do they do today?		**5)** What will they do?
2) What do they think today?	**3)** Marketing Intervention	**4)** What will they think?

2. Understanding the sanitation adoption cycle

The adoption cycle of sanitation can be a lengthy and complex process. The issues of a non-adopter's typical decision steps for installing a latrine or toilet product in a developing country feature in the study 'Who buys latrines, where and why?'[66], also referred to at the beginning of Chapter 3. Marketers should consider two critical questions during the market research process:

- **The way sanitation is adopted:** Whether adoption is done through the market will be determined by the type of technology to be adopted, the level of masonry skills required and the household capacity to hire installation or sanitation masonry services. Market-based sanitation has a product component (usually construction materials and spare parts) and a service component (including installation, masonry, fitting, drainage and credit). The marketer should understand the variety of ways in which sanitation is adopted. On one end of the spectrum, households install their own systems themselves, recycle product components or buy some of these in the market place. At the other end, sanitation products and services are delivered in full by a private agent. Understanding how the market clears is important to facilitate the adoption process.

- **When sanitation is adopted:** It is useful to understand the critical times when non-adopters are predisposed to adopt sanitation from a marketing standpoint. This understanding will inform both marketing strategies and allocation of resources. For example, seasonal effects of sanitation supply and demand are understood by looking at the historic parameter of adoption. People will naturally avoid construction or installation of latrines during the rainy season. Farmers will count on increased cash to invest in sanitation after the harvest season. Family events such as weddings, illnesses, births or starting early education could also trigger adoption. Other factors that influence when adoption takes place include systematic seasonal elements (or covariant) of supply of and demand for sanitation, such as rainfall or harvesting, and idiosyncratic elements of supply of and demand for sanitation, such as festivities and family events.

3. Understanding of sanitation markets

Market research should also assess how supply of sanitation meets demand for sanitation. We propose three key areas of understanding of sanitation markets:

- **Sanitation technology innovation gaps:** This area of market research is directly linked to the development of technical solutions and product range. Marketers want to know how marketing efforts will change the existing non-adoption situation. Starting points are the potential technology gaps that the market fails to bridge on its own. During the market research process, marketers want to have a sense of the divergences among which sanitation technologies are desired by non-adopters, which technologies are currently available to them, which technologies could be available to them (if the change is achieved), and what technologies should be available to them. Although the last point may sound prescriptive, one should recognise that the issue of sanitation is one where environmental externalities are present. Hence, the sanitation technologies offered should comply with appropriate environmental standards.

- **What prevents the market working?:** Understanding why the sanitation market fails to deliver the type of products that non-adopters want will guide formulation of market strategies to remedy the existing situation. This issue of market failure could be seen as weak sanitation supply and sanitation demand. Market researchers want to understand the source of these constraints. One of the observed demand constraints in Vietnam was the perception bias from non-adopters towards the costs of sanitation investments. Accurate market information is not available when these markets are extremely underdeveloped. Another common observation from weak sanitation markets is the insufficient technical capacity from local providers to supply the sanitation technology that non-adopters want. This may be due to the lack of incentives from these providers to internalise gains from learning investments or product development.

- **What opportunities exist to further develop the market?:** Leveraging opportunities could be seen as levers to develop markets that complement constraint removal strategies. Market researchers want to identify these opportunities during the initial research process. It is important to look at motivation drivers as leveraging opportunities during the section on developing effective communication and promotion strategies. Other leveraging opportunities are disseminating marketing messages through networks of early adopters of sanitation, and mechanisms for peer influence, such as women's savings groups and alternative community mobilisation activities. Some of these activities often take the form of social events, school programmes, village contests and community reinforcing messages through mass media.

6.2. DEVELOPMENT OF TECHNICAL SOLUTIONS AND PRODUCT AND PRICE RANGE

Product improvements are designed based on the wishes and means of setting up a participatory and customer-oriented process for technology development. Marketers

of sanitation embark on developing technical solutions and product range with the purpose of conceiving an **offering** that will best meet the sanitation needs of non-adopters **against all possible existing options**. Development of technical solutions and product ranges are linked to the 5 Ps, particularly to **Product** and **Price** in the context of segmentation and competition.

Developing technical solutions and product range does not necessarily require that marketers create completely new sanitation solutions from scratch. Successful innovation often comes in the form of adaptation of existing technologies to local conditions or development of new features for existing types of technology.

Valuable existing experience in the field of sanitation technology can be summarised in the following four working principles for developing technical solutions and product range.

- First, the practice of subsidising direct inputs has been unsustainable, and should be avoided to the greatest extent possible. Direct subsidies promote misallocation of resources, reduce accountability from service providers and generate market distortions. Conventional wisdom suggests that subsidy-based approaches have not delivered the expected improvements in sanitation in the developing world.
- Second, the devised solutions should be simple, user friendly, and easy to maintain and to operate. To the greatest extent possible, affordable, locally available materials and technology should be employed. These measures will increase the likelihood that innovation is sustainable. However, in an initial phase, importing designs and using costly material may be justified to promote cost-effectiveness and to promote cross-fertilisation of ideas. Preference should be given to local manufacturers that require relatively unsophisticated facilities, but not at the expense of affordability and functionality.
- Third, installation service requirements, procurement of construction inputs and maintenance services should be compatible with the local capacity of masons, retailers and service providers.
- Finally, the design phase is an ongoing process. Marketers should continuously strive to improve the sanitation value proposition by reducing costs and improving product functionality.

6.2.1. CONSIDERATIONS FOR DEVELOPMENT OF TECHNICAL SOLUTIONS AND PRODUCT RANGE

When embarking on developing technical solutions and a range of products, marketers should pay particular attention to these four areas of product innovation, which all have a major influence on the formulation of technical solutions and product range.

The sanitation offering: The idea behind the offering is to relate adoption of sanitation with the relative ratio of benefits from using sanitation against its costs. One way of affecting the offering (value proposition) of sanitation is by modifying the price-performance format of sanitation technology. For example, price-performance formats normally have been introduced favouring primarily the most affluent segments of the population, as they represent the point of market entry. Thus, to extend the range of products for the poor, technical research and product development should increase the available range of affordable choices. This was done in Vietnam for latrines, where reverse engineering allowed reduction of the costs of pour-flush and septic tank technologies.

Product segmentation and Market Niches: Product segmentation allows marketers to design sanitation products that are appropriate for specific niches of non-adopters.

There are several types of sanitation technologies and each of these have distinctive attributes. Technology types are diverse. Marketers should be aware of the extensive range of technology type and determine which of these options are relevant to the non-adopter based on the availability of water for flushing, affordability, soil percolation rates, cultural factors and composting features among others.

Attributes can be understood as physical characteristics of a product that distinguishes one from another. For simplicity, we classify attributes of sanitation products as those features that distinguish the range of products beyond the technology type. Examples of attributes include aesthetic characteristics of sanitation products such as shape, form or colours, and functional characteristics such as storing capacity of a septic tank or the degree of increasing modularity (upgradeability).

Competition: Sanitation marketers need to consider existing sanitation options available to non-adopters in the market and should include *subsidised sanitation* options as part of product analyses. Understanding the options offered by competition is necessary for assessing the potential of new value propositions of sanitation.

Regulation: Finally, compliance with existing (and future) regulation is critical. Regulation ensures that the environmental standards are preserved and that service provision is competitive.

6.2.2. STEPS IN DEVELOPING TECHNICAL SOLUTIONS AND PRODUCT RANGE

The challenge for underdeveloped sanitation markets is to increase adoption rates or stimulate upgrading of unsafe systems among non-adopters. Marketers need to identify potential technology innovation gaps that prevent households from adopting sanitation. The process of developing technical solutions and product range is related to bridging this gap.

Product development can be a lengthy process. An innovation breakthrough can take years to happen. If innovation were easy, there would be no need for public agents to take over the catalyst role of a private agent.

The following framework provides a simplified step by step process for developing technical solutions and product range. It has been adapted from the model: *"Market-Driven Product Development as a Model for Aid-Assisted International Development"* [67] which relates primarily to experiences in Vietnam.

These steps, detailed below, are:

- Identify a sanitation market niche
- Select promising sanitation technologies that have potential to fill that niche.
- Market test prototypes of sanitation solutions. Those that are not rejected should undergo engineering improvements to improve the sanitation value proposition.
- Perform market research, product costing and rate of return projections.
- Launch (pilot project)

1. Identification of a market niche and a product or service to fill that niche: The search is for a market niche, not simply a need. Prime consideration must be given to whether there is a market for sanitation that can and will pay a price sufficient to cover the cost of the product, plus a profit to the service provider, seller of spare parts and distributor. This kind of thinking runs counter to traditional development thought in which a need is identified, then development aid is used to fill the need. It may even seem cold-hearted and at odds with altruistic motives to exact a price for aid sufficient to cover the cost of the product and a profit. Sad experience has shown, however, that if "needs" are identified by outsiders without polling the market, they may prove to be a complete mismatch to the actual needs, and even desires of the targeted beneficiaries. One example comes from central Vietnam, where relevant market niches exist for composting, pour-flush technologies and two-tiered septic tank technologies. Composting technology appeals to farmers who use *night-soil* as fertiliser for their crops. Pour-flush technology is appropriate in areas where water is available. Septic tanks are popular technologies among people who desire toilets of the type found in cities.

2. Prototype Testing, Market Testing, Refinement of Prototypes, and Pilot Project: Large amounts of real feedback from the potential product market are required. Opinions of outside experts about the marketability of the product are not sufficient, nor are measures that only probe the market superficially. In Vietnam, where new pour-flush models were introduced in upland areas, prototype testing provided valuable information. The trial and error method allows sanitation engineers to collect information from non-adopters related to problems and successes of a new toilet version. The technical agents are able to take these challenges, think about solutions and experiment hypothetical improvements. The ability to adopt a new specimen mimics the process of natural selection. The model that is able to best meet the needs of the non-adopter is the model that prevails in the market.

3. Market Research, Product Costing, and Rate of Return Projection: For sanitation marketers, two return criteria must be met as part of the product development process. The first and most important is the sustainability criterion, which applies to the ongoing phase of production, service provision, sales and distribution of spare parts. In this phase, the profit margin must be sufficient to provide an adequate return to service providers, producers, sellers and distributors, though not necessarily to the initial product developers. In the case of sanitation, there are returns in form of status, prestige and comfort. Even if people do not really count the health gains in monetary terms, they are there and they are often very high. Women in Bangladesh told us that every diarrhoea incidence costs them 500 Takas (US$ 8); if a latrine costs US$ 7 in Bangladesh, this return on investment really becomes substantial and tangible.

6.3. SUPPLY CHAIN DEVELOPMENT

Addressing the market failure is essential to providing the necessary incentives to supply chains of sanitation. The experience suggests that successful methods to create incentive to private agents to participate in the market include subsidising technical training, transfer of appropriate technology and development services and credit markets. Development of the sanitation supply chain stimulates competitiveness for providers of sanitation. In the context of the 5 Ps, supply chain development relates to **Place** (also known as **product placement and distribution**).

One conceptual point of reference with which to understand sanitation supply chains is a system of interconnected nodes that perform different functions and play a different role in the market of sanitation. Examples of nodes in sanitation supply chain in Vietnam are producers or manufacturers of construction commodities, including cement, bricks and plastic pipes; manufacturers of sanitation spare such as like plastic vaults or tanks or even pre-made cement rings; service providers, such as installers, gas fitters and sanitation masons, septic tank emptiers; and the commercial distributors of sanitation inputs – regional agents, construction wholesalers and local retailers.

Sanitation marketers develop supply chains to address incomplete markets. The sanitation market fails to serve the poor because its private agents are unable to internalise gains from learning and innovation investments. The low return on learning investments is driven by the need to price sanitation products and services at a low level in order to penetrate a market comprised of poor households, and the generic nature of sanitation products and services and the operating environment.

As a way to address sanitation market failure, one or a combination of the following strategies have been utilised in the past with some degree of success:

- Improving suppliers' technical capacity to provide sanitation products that poor segments want;
- Improving providers' promotion capacity to sustain development of their consumer base; and
- Endorsing technical capacity of providers and competitiveness before the community.

Technical support has been critical for sanitation installers. Many poor people have televisions but not latrines; it is thus important to give latrines the same status as a television, and the sanitation installers – as the lowest link in the supply chain – need to boost their status by becoming trained and if possible certified as reliable craftsmen. In Peru, for example, the renowned plastic pipe company AMANCO is certifying some 3,000 sanitation installers annually after training.

6.3.1. STEPS IN DEVELOPING SANITATION SUPPLY CHAINS

Sanitation marketers start by identifying the source of market failure: what prevents sanitation providers from participating in the market? Once marketers have identified why markets are incomplete, a development and intervention strategy for supply chains should be used to respond to these initial findings. Here, a rigorous performance measurement framework will allow marketers to assess the impact of their activities and to collect feedback from implementation. We propose the following framework for marketers to embark on the process of supply chain development.

- Diagnosis;
- Formulation of strategies for supply chain development;
- Development of the provider network of sanitation; and
- Measuring performance of the providers' network in the form of new incentives, increased competitiveness and increased coverage of sanitation services.

These steps are now described in detail.

6.3.2. DIAGNOSIS

Identification of market failures in the form of constraints and opportunities for private agents to participate in markets is critical. Once identified, these constraints and development opportunities will become the basis for developing sanitation supply chains. To identify these levers, marketers want to diagnose the existing market situation. The following areas provide a starting point for market diagnosis.

- Technical competitiveness;
- Market development capacity;
- Finance;
- Policy and regulation; and
- Infrastructure development.

To diagnose the sources of market failure, marketers may rely on their own research framework. Some of these were suggested in the discussion of market research in section 2.4.

For retailers of construction material and sanitary spare parts, research should identify constraints and opportunities to sustain the availability of critical sanitary products for the target group. Identified constraints will then be turned into strategies to improve distribution, and thereby avoid potential situations of 'out of stock' key sanitary products and spare parts. Bridging information gaps may include measurements of distribution of critical sanitary products and spare parts in the local areas, retailers' capacity to respond to sudden demand surges, retailers' ability to provide embedded services such as finance or transport and availability of informed choice at the points of sale (POS) for the target group.

Other common tasks undertaken during situation analyses entail: the identification of market channels, availability of service and credit markets and roles of agents

in the supply chain. Prior to attempting to understand sanitation supply, marketers should exhaustively review existing studies, reports and statistics related to local sanitation industry.

The competitiveness of providers relates to profitability volume and profit margins, technical and entrepreneurial capacity. Other factors that relate to competitiveness are the regulatory environment, credit and related development markets.

6.3.3. FORMULATE STRATEGIES FOR SUPPLY CHAIN DEVELOPMENT

Development strategies should respond not only to market failure, but also improving provider competitiveness and capacity. Binding factors to market development are diverse. Responsive strategies should be prioritised to achieve increased social return with the least investment.

Such leverage points may be found by identifying nodes in the value chain where a small number of firms act as intermediaries for large numbers of customers, or by taking advantage of geographic clustering of similar enterprises or production systems, or by identifying policy levers that will remove constraints for many market actors at once.

6.3.4. DEVELOPING THE PROVIDER NETWORK OF SANITATION

Traditional development programmes, donors and governments develop markets directly, thus providing services to small providers or subsidising services from non-government providers. In a market-based approach, donors and governments try instead to promote transactions between private agents by 'facilitating' the expansion of markets rather than providing services.

Rather than offering financial assistance to suppliers, interventions concentrate more on technical assistance and incentives that encourage suppliers to enter new markets, develop new, low-cost products and expand services to under-served markets. At times, particularly in very underdeveloped markets, it may be necessary to support a particular business development service provider or launch a new service or model to demonstrate its potential. However, as the provider or service becomes viable, it is important to switch to the role of facilitator.

Development strategies for sanitation supply chains normally fall into local policy and regulation or development of service and credit markets.

1. Local policy and regulation: One of the most fundamental policies is promoting competitiveness of sanitation providers. "Traditional programmes often work with only one supplier, which gives that supplier an unfair advantage over others and suppresses competition in the market. Experts now think that facilitators should promote competition among suppliers, usually by working with many of them. This does not preclude working with one supplier for particular activities at some point – when testing a new product or in a new or very weak market – but a facilitator must always be careful to promote, not stifle competition." [68]

2. Service Markets: The role of Business Development Services (BDS) is crucial here. The notion "refers to the wide range of services used by entrepreneurs to help them operate efficiently and grow their businesses with the broader purpose of contributing to economic growth, employment generation, and poverty alleviation [69]." The BDS field focuses on promoting access to and use of these services by micro, small and medium scale enterprises. BDS are traditionally regarded as the non-financial services for businesses. They fall into the following types: market access, infrastructure, policy/advocacy, input supply, training and technical assistance, technology and product development, alternative financing mechanisms.

3. Credit markets: Facilitating development of credit markets for sanitation providers, however, can be as important as development of service markets. We also recommend that marketers develop linkages with other agents who can provide the required services. For example, a variety of financial institutions already in the market, including credit unions, co-ops, and commercial banks can provide financial services to sanitation providers. These financial services include microfinance, savings, credit, transfers and payment services, micro-insurance, and micro-leasing.

6.3.5. MEASURING PERFORMANCE OF THE SANITATION SUPPLY CHAIN AND SERVICE NETWORKS

Most programmes have a logic model that orders these goals and describes the overall supply chain development strategy – the causality between programme inputs, activities, outputs, outcomes and ultimate impacts.

We recommend here that marketers assess the performance of market improvement of the sanitation supply chain through both the performance of key providers of sanitation services and the performance of service networks and regulatory agencies serving to sanitation

providers. These parameters should be linked to the performance assessment of the integrated market development programme.

Performance of sanitation providers should be assessed in the form of new incentives, increased competitiveness and increased coverage of sanitation services. These parameters have direct impact on the access of non-adopters to improved sanitation. New incentives to enter and compete in the market include financial metrics such as profitability, business growth, increased customer base, return on capital invested, and non financial metrics, such as improved social status in the community.

However, what counts is – as we said earlier – neither the number of latrines nor the number of latrines sold; what truly counts is how the users will adopt sanitation and appropriate hygiene practices. This final outcome needs to be monitored regularly in order to finally measure if this will lead to a significant health impact. And this is again a more complicated step: even if people adopt hygienic sanitation practices, they may still be affected by the burden of other environmental diseases; they still may drink polluted water; and they still may be affected by indoor air pollution, by malaria and other similar diseases.

6.4. PROMOTION AND COMMUNICATION STRATEGIES

How does one design suitable communication strategies with the right messages? How can these messages be conveyed efficiently and effectively? This section will present a step-by-step methodology for developing communication strategy. It encompasses communication media ranging from static promotion such as leaflets, posters, wall-paintings, radio and television messages, to dynamic promotion media such as door-to-door visits, demonstrations, awareness creation films and theatres. We will discuss also the importance of influencing leaders (teachers, doctors, priests, politicians, sport-stars and so on) and agents of change, such as children.

Marketers employ promotion and communication strategies to influence perception of target audience towards a specific goal. For sanitation marketing, the goal is to increase customers' willingness to adopt sanitation.

Promotion and communication strategies create a roadmap for behavioural change. It links the message contained in the advertising campaign with the audience's existing knowledge and attitudes related to ideas stemming from adopting sanitation. Thus, marketers, through promotion and communication strategies, establish the 'path of least resistance' towards increasing demand for sanitation.

6.4.1. SANITATION DEMAND

Demand for sanitation can be defined as 'the aggregation of the decisions of individual households to adopt a sanitation improvement (or not)'.[70] Sanitation demand depends on several factors. Some of these factors can be influenced by promotion and communication strategies, and some factors may not. Factors that cannot be influenced by communication and promotion will be taken as given. Example of these given factors that affect demand for sanitation include access to water sewerage or a treatment plant or other infrastructure services, dispersion of population (density), proximity to human settlements (urban locality), income and idiosyncratic factors that affect each family in a particular way.

In the presented framework we focus on demand factors that can be influenced such as hygiene education and motivation of non-adopters of sanitation.

6.4.2. WORKING PRINCIPLES

Communication and promotion alone rarely create a breakthrough in sanitation adoption. These are combined with strategies that address market failure on the supply end of sanitation.

Successful marketers make use of experimental frameworks to develop and convey powerful messages. Through these frameworks, marketers collect systematic evidence of non-adopters' practices, perception, knowledge, attitudes, needs and aspirations in relation to sanitation. This evidence can be turned into motivational strategies to stimulate demand, adoption or use of sanitation.

6.4.3. STEPS IN DEVELOPING EFFECTIVE COMMUNICATION AND PROMOTION STRATEGIES

Developing effective promotion and communication activities is a rigorous process. It must be rigorous because promotion is costly, and if messages are not well understood by non-adopters or addressed to the wrong target group, resources can be wasted. The following guiding framework should be used by marketers who embark on developing communication and promotion strategies. The framework consists of nine steps:

1. Define the target group and audience;
2. Identify exposure patterns of the target group to different communication channels;
3. Identify determinants of demand for each phase of the adoption decision process;
4. Formulate a communication concept to increase the sanitation adoption rates;
5. Pre-test the potential effectiveness of the formulated concept;
6. Develop a creative process to turn the pre-tested concept into an executable idea;
7. Pre-test the potential effectiveness of the executable idea;
8. Produce, distribute, deploy and execute the communication and promotional activities; and
9. Measure performance of communications and promotion strategies

These nine steps are now presented more in detail.

1. Define the target group and audience: Whose behaviour we are trying to change? Marketers define the target group within the population to prioritise their efforts. In other words, they desire that their marketing investments, including promotion and communication, reach a particular group of people effectively and efficiently. Target audiences are distinct groups or segments of non-adopters. Groups are identified through the process of segmentation, including adoption stage of sanitation, demographic and other psychographic variables. The way marketers segment the population depends largely on the project's needs. Determining the right target audience is probably one of the most important parts of the marketing plan. Sanitation marketing projects usually rely on the selection of different target groups for different stages of market development. The experience from Vietnam suggests that women's groups are important influencers in the adoption decision of sanitation. Mothers are responsible for hygiene in the household. They are informed about episodes of diarrhoea in children. They are primarily responsible for seeking medical attention and health care for their children if needed. They are most convinced by benefits of privacy and convenience of sanitation. Mothers are in charge of saving funds for sanitation investments. Men often lead decision making for adoption of durable goods such as housing, latrines, pens and electronics and supervise construction activities at home.

2. Identify exposure patterns of the target group: to different communication (and promotion) channels. How does one reach this target group? Marketers need to know where to find the target group. Marketers refer to these groups as audiences when they are exposed to communication messages. Once marketers know where to find the target audience, they should select which of these channels is more appropriate to convey the marketing messages. Different target audiences are exposed to different communication channels. Marketers need to define the optimal **media mix**, which is the appropriate combination of communication channels.
Targeting according to exposure patterns is relevant to marketers for the following two purposes: first, to generate behavioural change by appealing to the perceptions of different segments, and secondly, to select effective communication channels according to the exposure of the segment which will convey the marketing message efficiently.

3. Identify determinants of demand for each phase of the adoption decision process: Marketers need to understand motivations for installing a toilet, and the constraints that block such intentions. These constraints and motivations will serve as levers of action. Marketers need to define a roadmap for changing perception towards adoption of sanitation change. Constraints appear in the form of barriers to behaviour change or adoption of sanitation. The more marketers are aware of what prevents the target group from adopting sanitation, the more they will be able to identify ways to change their perception, attitudes and knowledge towards sanitation adoption. Motivators work as triggers for adoption of sanitation. Similar to constraints, motivators can be used as levers for effective communication.

A relevant study in Vietnam offers some insights into what these constraints may be. Despite the fact that 91% of non-adopters stated 'lack of cash' as the main constraints to adoption, 58% of them owned a television, a karaoke machine, or a combination of both. In addition, the survey revealed that non-adopters were not able to estimate the costs of sanitation. Perception of costs among non-adopters was inflated.

4. Formulate a communication concept: Concepts are conceived in the mind of the consumer. Concepts are abstract or generic ideas generalised from a particular instance. In marketing terms, a concept is a promise that marketers make to consumers to improve their lives. Concepts contain key elements that will affect consumer perception of the improvement promised. It may be useful to think the concept answers the question of 'What's in it for me? And why should I believe it?' Concepts are used to develop the communication of an idea to the consumer. In other words, they are employed to identify a winning communication strategy. Communication concepts in the sanitation field in Vietnam relied on rational and emotional benefits. Rational benefits were centred on the introduction of a new latrine with improved cleanliness (fewer flies and less smell), modern design, ease of

operation, affordability and durability. Another approach used a satirical portrait of the disadvantages of performing open defecation, including exposure to dangerous situations and inconvenience. Finally, another campaign established strong linkages between sanitation, well-being of the family and children's cognitive development.

5. Pre-test the potential effectiveness of the concept: Pre-testing concepts is important to understanding the impact of the communicated idea for the consumer. Strong concepts contain a headline – which expresses the most important idea in the concept; consumer beliefs – expresses the target consumer frustrations or unmet needs; a benefit – what's in it for me? and a persuasive argument – reasons to believe on that benefit. The argument gives credibility to the product's promise and benefit proposition.

Insights are used in the process of concept development to overcome a 'benefit barrier' to try, use and adopt the product. Insights are 'a not-yet obvious discovery' about target consumer that enables us to establish a connection between our brands and consumers' lives. These bring out the emotional consumer reaction of 'you obviously understand me'. Consumer insight can be related to thoughts (values, beliefs), feelings (desires, emotions), or pieces of information (habits, needs).

Communication concepts are evaluated against the initial objectives. Marketers employ parameters to evaluate concepts such as their capacity to appeal to the target group, the level of understanding of consumers of the communicated idea, the level of distinctiveness of the idea and whether the idea is credible.

6. The advertising campaign: Developing a creative process to turn the pre-tested concept into an executable idea. Once marketers have a winning communication concept, they should embark on the creative process. Marketers use a creative brief to initiate the creative process. A creative brief is a summary of the communication idea. It contains not only the concept, but also information about the consumer, including the insights marketers know about them. A creative brief serves as a tool to engage the advertising agency (a third party) into the creative process. Marketers usually make use of a third party to carry out this process, given that the creative process is a specialised task. Thus, the creative brief serves as a document that creates a mutual understanding of what the creative process will deliver.

The third party – normally the advertising agency – will turn the creative brief into an executable idea, known as the **advertising campaign**.

7. Pre-test the potential effectiveness of the executable idea: Marketers should test the potential effectiveness of the executable idea – advertising campaign – to deliver the intended result. In other words, the testing is aimed at validating the power of the advertising campaign to encourage the adoption of sanitation among the target group. The way the advertising campaign is tested depends on several factors, including the budget allocated for evaluation purposes, and the extent to which marketers already know about the potential effect of the communication campaign. Normally, qualitative research is employed for the purposes of pre-testing the executable idea.

8. Produce, distribute, deploy and execute the communication and promotional activities: Once marketers approve the use of the advertising campaign, they make it available to the target group. The way the communication is conveyed depends largely on the outcomes described in Step (2) Identify exposure patterns of the target group to different communication (and promotion) channels.

9. Measure performance: Marketers should carefully assess the performance of the communication and promotion strategies to deliver results.

6.4.4. AN ILLUSTRATIVE ADVERTISING AND PROMOTION CAMPAIGN[71]

Above-the-line advertising usually refers to use of mass media, and includes television, radio, and billboard advertising. Below-the-line usually refers to use of direct-contact activities, which may include public meetings, street theatre, mobile cinema, and other special events, as well as educational sessions in schools and health facilities. These activities carried out by event management organisations and existing organisations, such as local government, schools, health authorities, NGOs, commercial retail outlets, mosques and so on. The more appropriate the mix of communication channels to the local situation, the more effective the campaign will be. Some examples of 'above-the-line' (ATL) and 'below-the-line' (BTL) activities are as follows:

Below-the-line (BTL) activities

Linking supply and demand: to enable the target group to discuss with service providers the possibilities of purchasing a system and hear from the providers about any special offers regarding technical assistance, service and financial help. This approach is particularly appropriate for on-site sanitation where each system stands on its own, unconnected to any sewer lines or communal

facilities. Technical advice regarding the choice of system, the best site for a unit, the depth to which any pit should be dug, and requirements for lining, ventilating, sealing and covering the pit should be available from technicians who can visit the household for detailed discussions. This information should also be available in the form of printed material such as leaflets.

Meetings and visits: various types of meetings can be used to ensure success. This may include individual discussions with community leaders, house-to-house visits by community development officers or sanitarians, visits by women health workers to the women in the community, and general public meetings where the wider issues can be discussed by the whole community.

Demonstrations and mass treatment: demonstrations may be held using animations in videos to show what cannot be seen to the naked eye. This is most effective when the consequences of inadequate sanitation are shown.

Community groups: selected target groups within the community may be invited to participate in drama or role playing related to health education and the need for sanitation. Stories and songs can also be effective ways of communicating ideas.

Leaflets: simple technical information leaflets are required that contain illustrations and drawings that have been pre-tested. The leaflets should describe the different parts of the system, and explain how they work together and how they can be constructed. Written information may also be supplied detailing the help that each household can obtain from the agency. Even if householders are illiterate they are likely to be able to call upon others to explain. It is important that everybody has equal access to details of assistance.

Vague promises given at public meetings are not sufficient. The information given should stress that any solution can eventually be upgraded. Even if members of a household find that they do not have the required piped water or that they cannot immediately afford the type of sanitation they desire, they should be able to see that there are ways to upgrade their facilities in stages while enjoying the benefits of improved sanitation.

Above-the-line (ATL) activities

There are many forms of the mass media that can be used for promoting specific sanitation options as well as for health education. Their use and the balance between them will depend on the size of the target group, the relative wealth of the people and available funding. Posters, billboards, newspapers, radio, loudspeaker trucks, slides, flip-charts, film, video, and broadcast television have all been used successfully in different environments and in different combinations. Careful planning is necessary, as too much information and health education too rapidly delivered may lead to a build-up of resistance against the ideas.

The use of audiovisual materials for sanitation programmes is emerging. Care should be taken to ensure that all the agencies, institutions and health-related bodies have prepared their staff to give the same message. Any conflict between them will lead to mistrust on the part of prospective users.

PART THREE: TOOLS FOR COMMUNITY-LED TOTAL SANITATION (CLTS)

Excerpts from the methodological toolbox of VERC, Village Education Resource Centre, Dhaka, Bangladesh:

METHODOLOGICAL TOOLS FOR TOTAL SANITATION 7

The following guidelines are taken from the Process Documentation "100% People Initiated Total Sanitation" [72] published by VERC (Village Education Resource Centre) and is here reproduced with the kind permission of VERC.

This section outlines the various activities that are used in the approach to ensure community member involvement.

7.1. ENTRY PRA (PARTICIPATORY RURAL APPRAISAL)

Entry PRA is held in a community to collect information on the existing WATSAN situation, and to encourage the community to analyse the information and motivate them to take action to improve the situation. Effective Entry PRA is dependent on field workers building a good rapport with the community. Only then can field workers really develop their own understanding of the community, making sure they understand the situation and issues faced. Once they understand the community, they can work effectively with its members to mobilise them to take action for sustainable change.

Generally a PRA session covers between 100 and 125 households. The time involvement will vary depending on how many people participate but usually it takes two or three days. However, this may be over a period of weeks. Priority must be given to the community members' time, and not just the availability of field workers. A team of four or five field workers (with Senior Health Motivators and the Health Motivators) should agree on what role each individual will have before going into the community. Ideally when working within the community, the individual who leads the team will be the Health Motivator, who will continue to have a work-ing relationship with that community. Detailed notes must be taken during the process so it may be useful to have more than one person taking notes.

A range of PRA tools are used during the process and are key to helping the community identify and analyse their current situation. Figure 2 shows those tools that are routinely used during Entry PRA. It is very important that field workers fully understand the purpose of the tools and are familiar with their use prior to their entry into a community.

While each tool helps to clarify a particular aspect of the WATSAN situation, the information gathered should be cross checked and if necessary information should be rechecked with the community. To do this the team must spend time consolidating the information soon after they have collected it, usually at the end of each day or session. The important thing is that at the end of the process the community and field workers have a clear understanding of the situation so that an effective plan of action can be drawn up.

Figure 2 Tools used in Entry PRA

Tool	Purpose
Transect Walk	To observe the current situation and build rapport with the community
Social Mapping	To establish the number of households, population, latrines and water points
Problem Tree/Cause Affect Analysis	To identify the affects of the current latrine use pattern
Defecation Site Visits	To observe the current situation with regards to faeces dispersal due to open defecation
Seasonality Trend Analysis	To analyse the availability of water and sources used throughout the year
Wellbeing Ranking	To establish the economic status of the households
Venn Diagrams	To identify the key people who have influence in the community

7.2. TRANSECT WALK

The first stage of entry into a community involves a Transect Walk and rapport building. This builds relations between field workers and the community members. It is very important to identify some community level catalysts during the process. These are people who are accepted in the community, are willing and able to support field workers in working with the community and who will take the initiative to get the process on the move.

When the team enters the community a group of people will naturally gather around. Having introduced themselves, the team can then ask this group if they will show them around the community. When walking around on this tour, topics discussed include the history of the community, the types and number religious groups, number of households, the total population and main income sources. The pattern of housing, crops and sanitation aspects are observed, with questions being asked about particular issues as they arise.

The Transect Walk also visits sites of open defecation and garbage dumping. The community feels embarrassed by the situation and the accumulated filth, but the visit triggers a discussion about how they feel and their desire for change. The visit helps the community to realise that action for change can come from within the community, not outside. The Transect walk takes between three and five hours and should cover the whole community.

Invariably, by the end of this walk, some of the community members involved have said that they want to see a change in the WATSAN situation. So the team asks these community catalysts to hold a meeting, which includes both men and women, so that this awareness of the situation and desire for change can be shared with others in the community. If a community is in an extremely conservative Muslim area, sessions with males and females can be held separately. The other key purposes of the next meeting are to triangulate the information given and to get maximum participation in the identification and assessment of the existing situation and feasible solutions for improvement. The time and place for the meeting is agreed through discussion with the community so that it is acceptable to all. Some of the community catalysts are asked to assist in holding the session on the scheduled date.

7.3. COMMUNITY MOBILIZATION MEETING

Before the meeting, the team distributes assignments among themselves, and decides who will take notes and who will act as the facilitator for the various tools. On the day, the team should arrive at the community at least one hour before the agreed-upon time with the community and make contact with the identified organisers from the community side. It is important the team checks preparations and arrangements such as seating, making any changes needed beforehand. Circular seating on the floor is best to ensure everyone can participate in the session. By arriving early, the organisers can remind people to ensure that everyone attends the session on time.

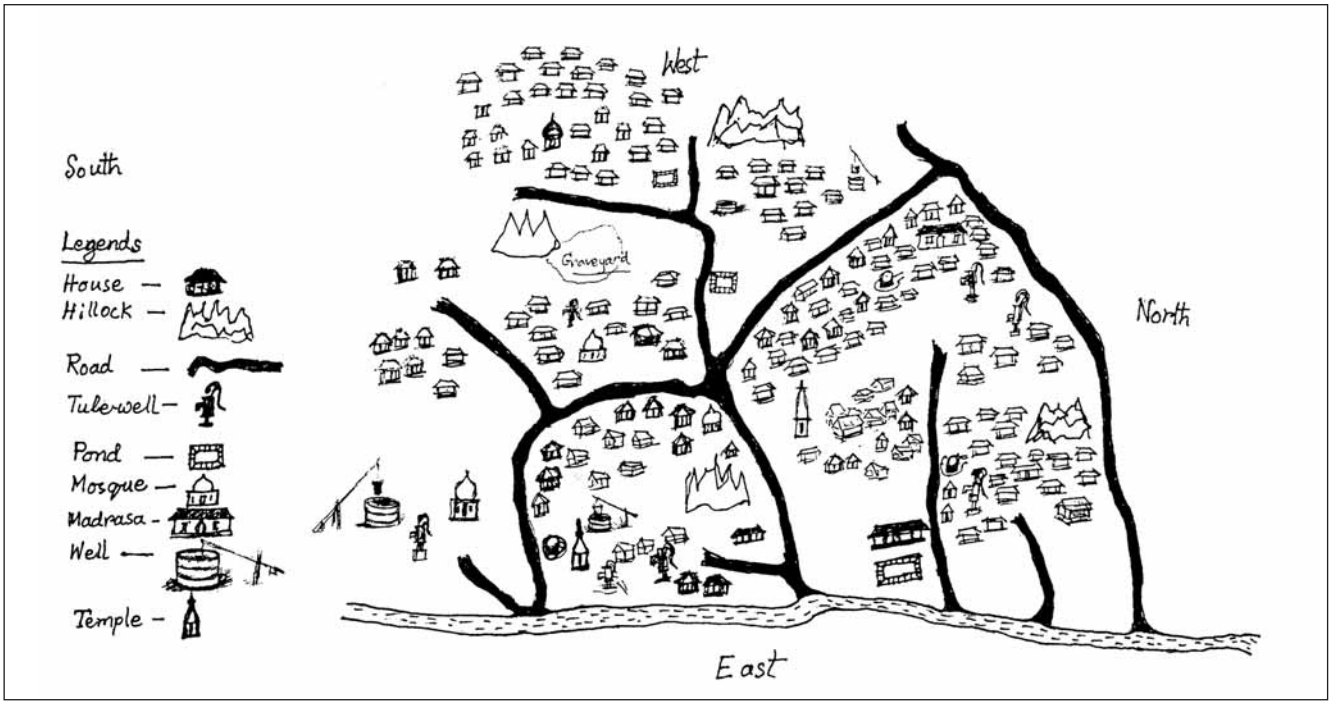
The purpose of this next stage of the PRA process is to collect information on the WATSAN and socio-economic aspects of the community in the maximum participatory manner. The tools used are social mapping, problem tree/ cause affect analysis, Seasonality trend, Venn diagram, focus group discussion and wellbeing analysis. Before starting to ask the community about themselves it is important to first use an ice-breaking exercise to put people at their ease and to give a brief orientation on the facilitating organisation.

7.4. SOCIAL MAPPING

The participants are asked to introduce the community by reflecting it in a map, featuring the roads and lanes within the community, common places and all households, water points and latrines. The map is drawn on a large sheet of brown paper using various coloured marker pens. The participants decide who will actually draw it and direct those drawing in the process.

The location of the venue is marked on the map and then road/lanes are drawn. Then households are drawn using a symbol for each family so that the map can show the number of families in the community. The name of the head of each household is recorded in one corner of the map or an associated sheet of paper. Once this is complete, then they are asked to draw the locations of water points and latrines on the map and indicate the various types of each. Any environmental pollution hazards are also indicated. When the drawing is complete, the participants check the map to see whether everything has been properly drawn or if there is anything missing. Once everyone accepts the map as a community document containing all the information, compilation of other supporting information begins. During, or at the end of the process, the map is accurately copied by one of the field workers.

Using the map, participants are encouraged to compare the number of families/households with the number of latrines and tubewells. The gap between them becomes visible and people usually start commenting that the situation in the community is unacceptably bad and



unhealthy. The facilitator then encourages the participants to consider the affects of the gap using a problem tree or cause and effect analysis.

7.5. FAECES CALCULATION AND CAUSE/EFFECT ANALYSIS

Using a piece of poster paper and markers, participants list the effects and name the diseases caused by the mismanagement and spreading around of human faeces. When focusing on the lack of latrines, participants identify the practice of defecation with the families with no latrines. The facilitator then asks the participants to visit the defecation sites in the community so they can make a collective assessment of the situation. Often this is the first time they have seen the situation and been prodded to reflect on its community-wide affect, so they respond by becoming embarrassed and keen to do something about it. After returning to the group exercise, the participants calculate the amount of faeces being added to the community. First the number of people defecating in the open is calculated. Then an estimate is made as to the amount of faeces a person produces daily. These two figures are then multiplied (see below) to give a total amount of faeces added to the community each day.

This figure is then multiplied by 7 to give a weekly figure and/or by 30 to give a monthly figure and by 365 to give an annual figure. Participants describe this in terms of truckloads or the size of a hill to create a visual picture.

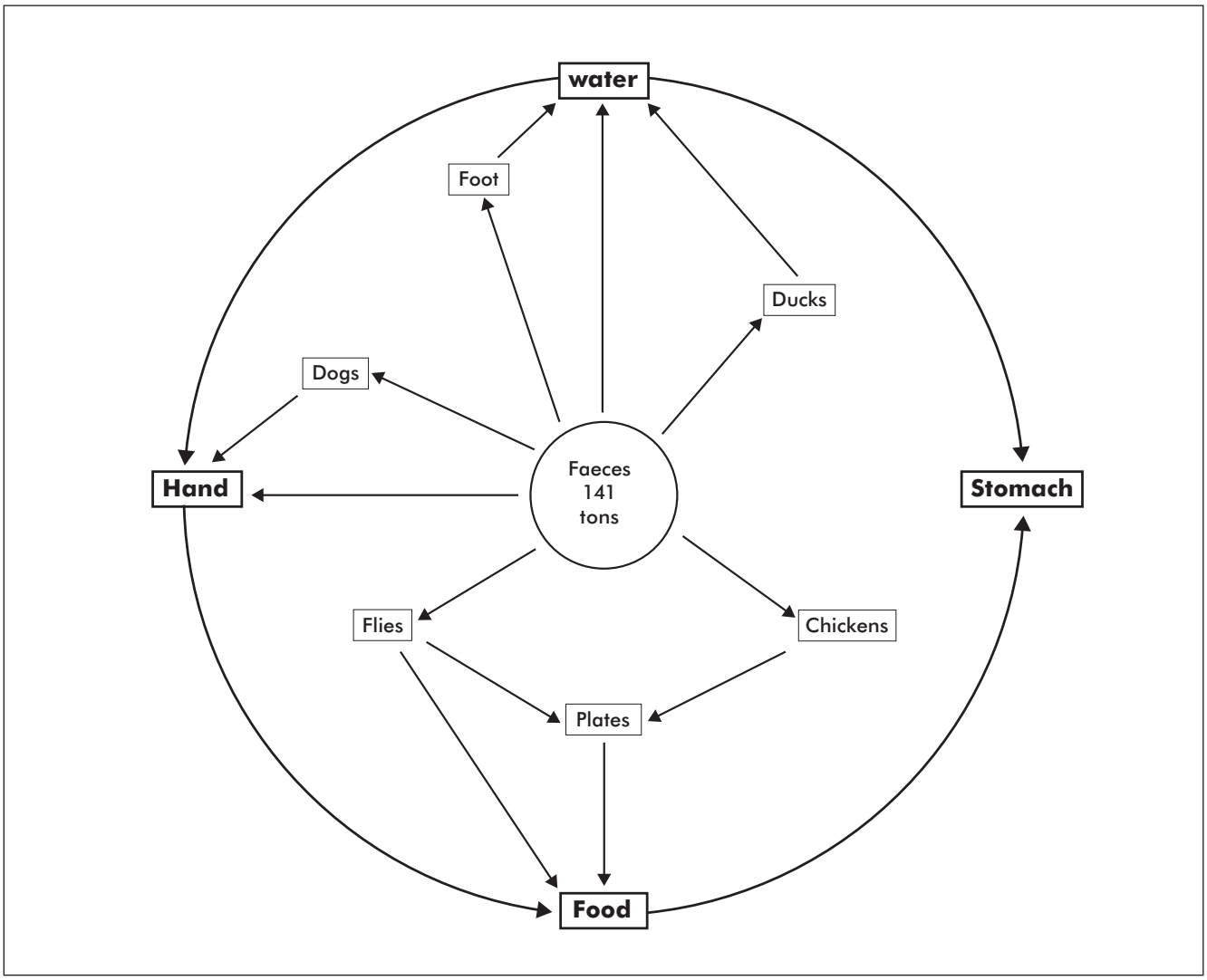
Community Faeces Calculation

Total Number of Households in the Community:		145
Hygienic latrines User Household:		15
Open space/hanging latrine User Households		130
Number of people Open space/hanging latrine Users:		485
Participants decide on average each individual passes 800g of stool a day		
Daily adding 485x800g	=	388kg
Weekly adding 7x388	=	2716kg
Monthly adding 30x388	=	11,640kg
Annually adding 365x388	=	141,620kg
This is 3,631 maunds or 26 trucks		

Amount of faeces added to the community daily	=	Number of people defecating in the open	x	Amount of faeces a person produces daily

The facilitator then asks what happens to the faeces and what affect this has on all members of the community. By drawing a diagram to show what happens to the faeces, the participants realise that open defecation is a common concern that needs to be taken-up collectively and that other individual behavioural practices, such as hand washing and covering food, are linked with the distribution of faeces. Participants then indicate the level of particular behaviours within the community.

Diagram showing what happens to faeces



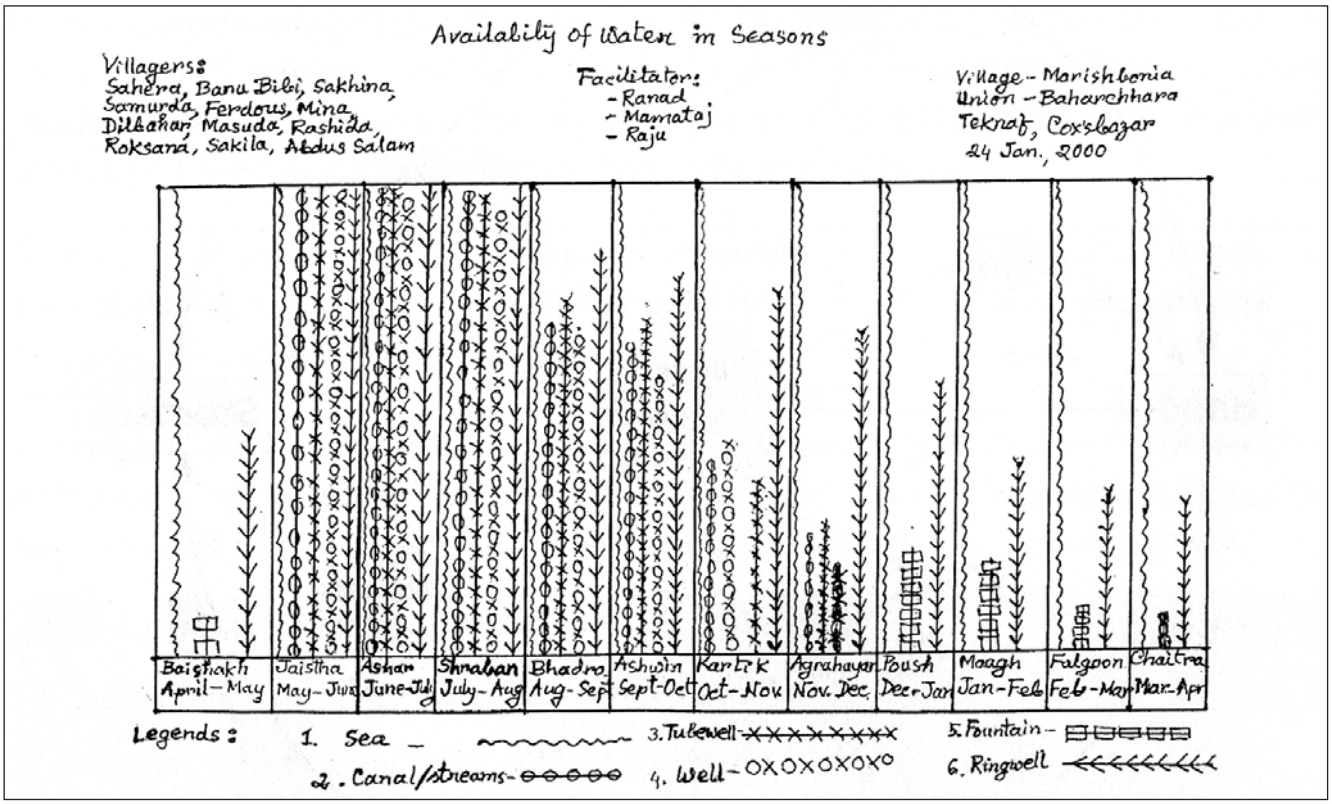
Participants usually identify the need to install latrines for all families in the community as the remedy, so at this point a discussion is directed towards this. They are encouraged to consider who will take the initiative, from where materials can be purchased, and what else can be done for families who cannot afford to buy latrines immediately or have nowhere to construct them. The analysis of the situation is copied and notes taken of the discussion and visits to open defecation sites.

7.6. SEASONALITY TREND ANALYSIS

After the issue of sanitation is covered, the session then focuses on water issues. Referring to the map, the number of tubewells and the mode of water use are considered. The usage of safe water for various purposes is discussed and the availability of water around the year is analysed using a seasonality trend analysis. The participants draw up a calendar and show the water sources down the side. Stones, twigs or other markers are then used to show the availability of water throughout the year. Water quality, water pollution and the effects of unsafe water are also discussed. The calendar is copied and notes of the discussion are recorded.

7.7. WELLBEING RANKING

Both sanitation and water point provision improvement relate to the linked issues of cost and affordability. This



highlights the need to assess the wellbeing status of the households. Wellbeing ranking is used to identify this. First of all the participants agree and define the categories according to possession of wealth and riches. The categories and definitions are recorded on poster paper. Then, taking each household's possessions and situation into account, the number of households in each category are identified and recorded. A member of the team copies this information, in addition to recording any useful information that was discussed during the exercise.

Class	Month (Bengali)												Ways to face the crisis months
	Baish-akh	Jaist-ha	Ash-ar	Shara-ban	Vha-dra	Ash-win	Kar-tik	Agrah-ayan	Pou-sh	Ma-agh	Falg-oon	Chai-tra	
Poorest of the poor	☺	😐	☹☹☹☹	☺☺	☹☹☹☹	☹☹☹☹	☺☺	☺☺	☺☺☺	😐	😐	☹	In months of crisis • Low intake of food • Borrows some money to pay back in months of earning • Sells the trees around the homestead • Takes non-traditional food • Goes out for to distant areas in search of employment for 5-15 days • Woman of the household moves out to collect rice, rice waste from well off families without informing the male
Poor	☺	☺	☹☹☹	😐😐	☺☺☺☺	☹	☹☹☹☹	😐	☺☺☺	☺	😐	☹	• Same as poorest of the poor
Middle class	😐	😐	😐	😐	😐	☹	☹	☺	☺	😐	😐	😐	• Borrows loan from others in Ashwin and Kartik; Borrows from the rich
Rich	☺☺	☺	☺	☹	☹	☹☹☹	☹	☺☺☺☺	☺☺☺	☺☺	😐	😐	• They do not face serious crisis at any stage

Notes: Mortgage: Takes advance against growing crops at a lower rate compared to previous year's rate as claimed by the lender. This borrowed amount is paid back to the landlord at the time of harvesting in terms of crops grown in the land on sharecropping basis. The poor borrower is exploited in this type of deals.

Happy: ☺ Fairly happy: 😐 Distress: ☹

7.8. FOCUS GROUP DISCUSSIONS

Female field workers also join the community women in their courtyards to hold focus groups of about 10 people to discuss the issues the women face with regard to latrine use, water sources and behavioural habits. It is important to discuss these matters with women on their own, because in mixed gender groups, often women do not feel like they are able to fully participate in the discussion. Notes are taken of these discussions.

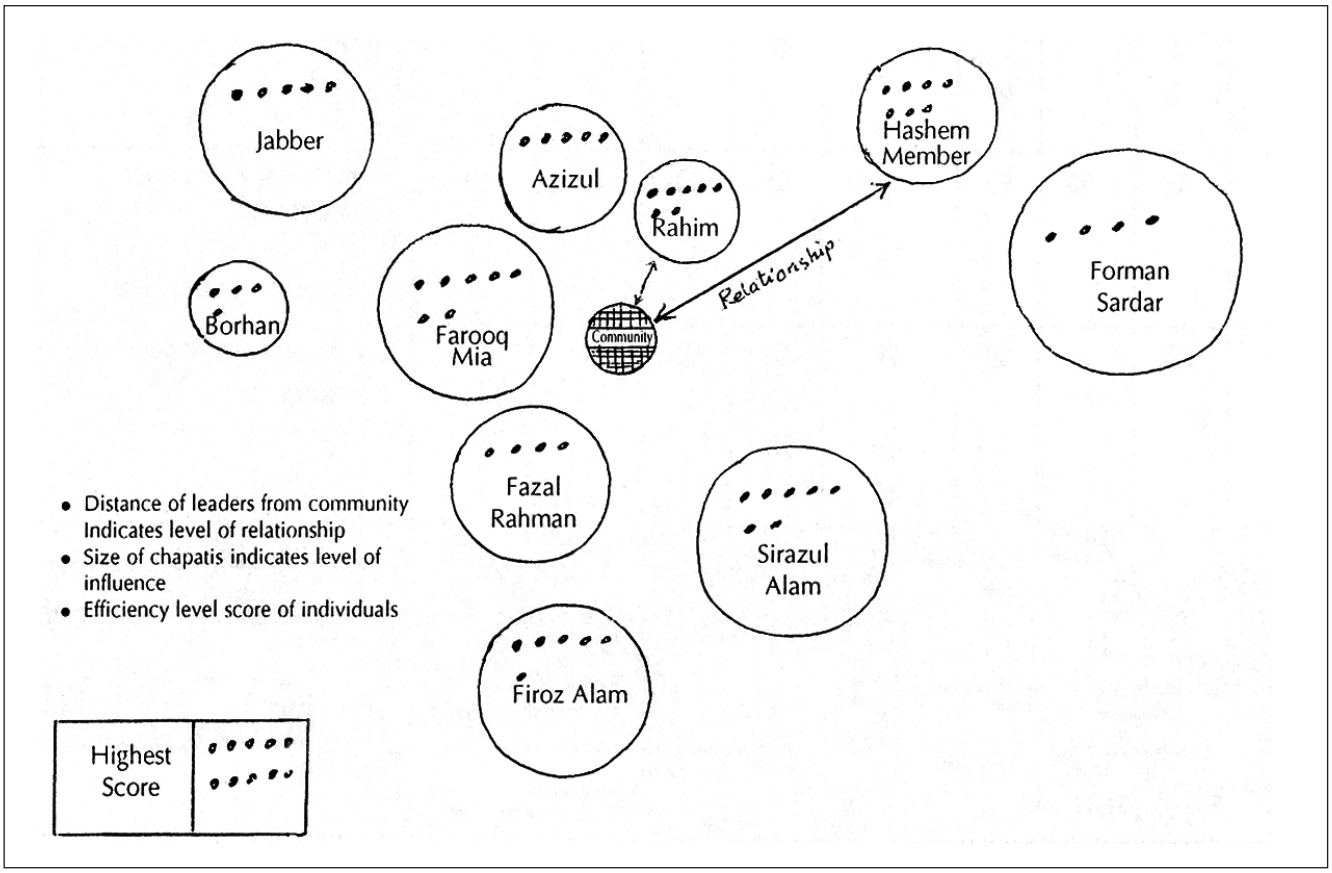
7.9. VENN DIAGRAMS AND POWER STRUCTURE

The community is encouraged to form a WATSAN Action Committee to plan activities and take a lead as soon as possible on the actions already highlighted. In order to identify who in the community has influence and is likely to be accepted in a leadership role either as a member of the WATSAN Action Committee or as a motivator of change, a Venn diagram is used. Names are proposed and written on discs of paper the size of which reflects their amount of influence. Once all the names have been recorded the discs can be arranged in a pattern to show how acceptable each individual is to the community as a whole. Then stones or twigs or other markers can be used to show who has the capacity to do the most for the community. From this analysis possible members for the committee can be selected. The date, time and venue of a meeting to actually form the WATSAN Action Committee are then agreed. The team records the diagrams and key points of the discussion along with the date time and venue of the meeting agreeing who will attend on behalf of VERC.

After all the exercises have been completed, a community meeting is held where members of the community present to the whole group the key findings of the PRA. At this meeting, agreement is reached on the fact that the community will take action to improve their WATSAN situation. The original analysis charts, such as the Social Map and Seasonality Trends, etc. should ideally be left with the community, as they will be used in the planning process. If necessary, the team can return them at a later date once they have copied them.

Having returned from the community, the team consolidates the information, checking for triangulation through the different tools or from different groups. The information is then recorded in a community profile so that, as well as informing how VERC will work with the community, it can be used as baseline data when evaluating the outcomes of the work.

VENN diagram showing the influence of each person



SOCIAL ORGANISATION FOR TOTAL SANITATION

8

After the PRA methodologies have been applied, the total sanitation has to organise the community as follows:

8.1. FORMATION OF THE WATSAN ACTION COMMITTEE

The key to the success of the approach is the involvement of the community members themselves in all aspects of planning, implementation and monitoring. The WATSAN Committee is a community group that takes the lead on improving the WATSAN situation. It is therefore critical to the approach. When forming the committee, Health Motivators try to ensure that both males and females are involved, and also that all economic groups are represented. This is important, as the emphasis is on the community as a whole making changes and the better-off members supporting those less well off. Health Motivators also try to ensure that, while key influencers are involved, no particular individual dominates the committee to the detriment of others.

The role of the committee is to plan, lead the implementation, and monitor the achievement of 100% sanitation in the community. It is expected to do this is a participatory way involving all sections of the community.

The individuals identified during the PRA exercise as potential WATSAN Action Committee members are invited to the meeting finalise the formation of the WATSAN Action Committee that was arranged at the PRA exercise. In some cases, formation may actually occur during the entry PRA but more commonly, a separate meeting is planned. At this meeting, their involvement is confirmed, and a chair, secretary and possibly treasurer are selected. Arrangements for regular meetings are also agreed upon. At the first meeting the field worker may take notes on behalf of the committee, but committee members are encouraged to keep record of their own meetings in a specific book in future.

To support the WATSAN Action Committee, VERC provides two formal training workshops, and the committees nominate two individuals for each.

- Leadership Development and Group Management to enable the WATSAN Action Committee to function effectively as an organisation.
- Basic Health and Hygiene Education to enable members to promote good Health and Hygiene practices within the community.

It also arranges hands-on orientation on the process of Entry PRA, as the members of the WATSAN Action Committee in turn become facilitators of the 100% Sanitised Union approach in other communities. This reduces the reliance on NGO staff in achieving 100% Sanitised Unions and increases sustainability.

8.2. MEETINGS OF THE WATSAN ACTION COMMITTEES

In order to fulfil its role, the WATSAN Action Committee meets on a regular basis. The committee itself decides on the frequency but it generally tends to be monthly. Health Motivators attend the meetings to provide technical support and help the committee to focus on the key issues regarding 100% sanitation. While the Health Motivators do not chair the meetings, they must prevent problems of unequal participation or over-dominance by individuals at an early stage.

The first meeting of the WATSAN Action Committee concentrates on drawing up an action plan to improve the WATSAN situation. Health Motivators introduce the idea of the 100% Sanitised Community, and encourage the committee to consider their own definition while ensuring that the fundamental idea of breaking the faecal oral chain is retained. Through this, the goal they are aiming to achieve is clarified. Many of the ideas for improving the situation will have been discussed during the Entry PRA but these are formalised and recorded in a draft plan. The plan needs to include what it will achieve, how it will achieve it, who will achieve it and by when they will achieve it. The plan usually concentrates initially on latrine installation, as that is often the first step to long-term improvement. The Health Motivator facilitates the committee's planning to include other aspects, depending on the situation at the time. It is important that the committee draws up a realistic plan that they and the community will implement and monitor. Once the plan is written, it is then shared with the wider community.

At subsequent meetings, the WATSAN Action Committee reviews the progress of implementation of the action plan and takes action as necessary.

8.3. MEETINGS WITH THE COMMUNITY

The approach is a community-level one with community members themselves being the main implementers of the action plan. Meetings are therefore held with the community to support the implementation of the plans of the WATSAN Action Committee. Through these, the members help each other and find collective responses to problems.

A member of the WATSAN Action Committee will call a meeting inviting all households, and the Health Motivator and the concerned Community Volunteer (CV) will attend along with members of the community. The aim is to ensure at least two-thirds of the households are represented at meetings, as it is difficult to promote community action when less of the community is represented. Where possible, the meetings are facilitated by a member of the WATSAN Action Committee or community but the Health Motivator may have a key role in providing information. Meetings serve a variety of purposes such as to discuss progress, suggest solutions, explain technology and see where the VERC's input is needed to implement the action plan. The community members should always take the decisions and if these affect the WATSAN Action Committee's work, a member of the committee should record them. While the Health Motivator may take notes for themselves, this note taking should not replace the need for the community to keep their own records.

There are occasions when meetings have one specific purpose, such as the selection of a water point site. Often at these, only a subsection of the community will participate.

8.4. FORMATION OF THE UNION STEERING COMMITTEE

In order to promote a coordinated achievement of a 100% Sanitised Union, it is important to involve the elected Union level representatives, in addition to other elite members of society, such as teachers, Imams or other religious leaders, Once individual communities have started to make progress, a workshop is held involving the Union Parishad Chairman, and a female elected member and a male elected member from several Unions. At this workshop, the idea of a 100% Sanitised Union is discussed, along with the approach to achieving it. A key institution in the approach is the Union Steering Committee, as it encourages individuals and communities within the Union to work towards achieving a 100% Sanitised Union and monitors the activities of the community-level WATSAN Action Committees within the Union.

After the workshop, the Union representatives arrange a local meeting in their Union Parishad centre to share the idea of the 100% Sanitised Union approach with other elected members and the elite. Usually the APC and Health Motivators attend this meeting, and may even facilitate it. At this meeting, a Union Steering Committee is formed consisting of 25 to 30 members. The Union Parishad Chairman acts as an ex officio President, and a Vice-chairman, secretary and treasurer are also elected.

8.5. MEETING OF THE UNION STEERING COMMITTEE

The Union Steering Committee draws up an action plan to support the achievement of a 100% Sanitised Union. In the same way as the WATSAN Action Committee's plan is implemented by others outside of the committee, so to is this plan. The Union Steering Committee encourages institutions such as WATSAN Action Committees and Cultural Groups formed through the approach, and other existing groups such as School Committees and Bazaar Committee, to promote and work towards 100% sanitation. Some of the members themselves, such as Imams, have a clear role to play in encouraging individuals to change their behaviour and contribute to the 100% Sanitised Union. Initially committees meet monthly to review progress and plan; however, this may change to quarterly in time. Union Steering Committees are encouraged to hold an annual formal workshop with WATSAN Action Committees to discuss progress and share ideas.

8.6. MEETINGS WITH PRIMARY GROUPS

The approach involves no subsidy for latrines and a fixed participatory cost for water points that depends on the technology. To provide a mechanism for saving towards hardware, communities can choose to form Primary Groups. These are groups of women who collect savings for health and hygiene purposes. Often they are formed through Health and Hygiene Education sessions because, as the women decide they wish to change their behaviours and those of their families, they realise there is a monetary cost involved. The women who attend the sessions are usually the poor and poorest of the poor and they ask the field worker to help them set up a formal method of saving.
Once the primary group is formed, the members set the frequency and amount of savings to be deposited. This tends to be the same for everyone to make things easier. The women select one member who is responsible for collecting and keeping the savings and depositing them in a bank when they reach a certain amount. The Health Motivator may help the group to set up the bank account,

but they have no responsibility for ensuring people save or for the money collected. Every week or agreed interval the Primary Group meets to collect the savings.

The initial purpose of saving is usually to purchase latrines or water points. However, as the members make their purchases, their need to save changes to more general health and hygiene issues. Some members continue to save so that they can upgrade their latrines as time goes on. The group controls the savings and so may extend the uses of their savings they may even choose to use the capital as a loan fund for income generation activities.

8.7. FORMATION OF CULTURAL GROUPS

Song and drama are important features of Bangladeshi culture and so the use of cultural groups in promoting 100% Sanitation is very powerful. Health Motivators and the APC discuss the formation of a cultural group with people within the Upazilla who have a background or interest in folk culture. Once formed, the cultural group's role is to write songs or dramas on WATSAN issues that they can perform in communities to create interest and promote action towards achieving a 100% sanitised community. Groups usually perform on public occasions and at WATSAN campaigns. Requests for performances may come from Union Steering Committees, WATSAN Action Committees or individuals. While the group members give their time on a voluntary basis, their travel expenses are paid by VERC and they are awarded with a certificate of honour.

8.8. COMMUNITY CLEANING DAYS

As far as environmental health is concerned, community action is the only way to bring about effective and long-lasting improvements. When a community is making a change at household level, then the WATSAN Action Committee may suggest that public places such as the market place, school compound, bus stop and the lanes need attention. They analyse which areas are potential risks to the health of the community and the causes of the problem. They then agree within the community what specific areas need to be cleaned and how this will be done. Often they use a Community Cleaning Day to carry out the work. A group is encouraged to get together to clean a specific area at a particular time. The cleaning exercise is usually done with great pride and celebration, and the difference is clearly visible to all the participants of the exercise. Following the exercise, action may be agreed upon to ensure that the standard of cleanliness is maintained.

8.9. CONSTRUCTION AND INSTALLATION OF HARDWARE

Once people are convinced about the need to change their behaviour then the necessary hardware needs to be installed to enable the change. Initially the focus is on latrines.

The no subsidy policy with latrines means people are free to select the latrine model that suits them best and to get it from where ever they want.

VERC promotes four basic types of latrine:
- Homemade Pit Latrine
- Water seal Pit Latrine
- Direct Pit Latrine
- Offset Pit Latrine.

However there are variations in these types and local innovation is actively encouraged to expand the range of options available to people. Currently 20 options (seven Homemade Pit, two Direct Pit, two Water seal and nine Offset Pit, four of which are homemade) have been documented in order to provide design outlines and costings for communities.

The key consideration when promoting options is that they satisfy the criteria for being hygienic:
- Preventing contamination of other things by faeces
- Free from odour
- Free from flies.

Health Motivators, Assistant Project Engineers (APEs) and APCs are trained in the design of the various types of latrines, selection of appropriate options and in siting the latrines. They then support community members in selecting the latrine option that best suits their individual needs, including affordability and installation of the latrine.

This was an excerpt from VERC's Process Documentation on the total sanitation approach. For more details contact: Shaikh A. Halim, Executive Director, Village Education Resource Centre (VERC), B-30, Ekhlas Uddin Khan Road, Anandapur, Savar, Dhaka-1340, Bangladesh.

FOOTNOTES

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POVERTY ALLEVIATION AS A BUSINESS - THE MARKET CREATION APPROACH TO DEVELOPMENT

is the title of the original study by the author of this - unrevised - 2006 volume, Urs Heierli. Published in March 2000, it summarised the experiences of his 12 years working as country director of SDC in Bangladesh and India (1987-1999).

Can poor people make a business with goods and services that are relevant for poverty alleviation? The answer is yes, as the six examples of the original study show. To make it happen, markets should be created and technologies must be validated, tested and introduced. If a critical mass of demand is created, small private enterprises will emerge to respond to these new business opportunities.

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5. '6,000 private workshops produce over one million latrines per year in Bangladesh'
6. 'The rope pump in Central America: the scope for private drinking water supply'.

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ONE FLY IS DEADLIER THAN A 100 TIGERS – TOTAL SANITATION AS A BUSINESS AND COMMUNITY ACTION IN BANGLADESH AND ELSEWHERE

The facts are known: every hour more than 300 children die from diarrhoeal diseases due to lack of proper sanitation and access to safe drinking water.

There is, however, good news, from Bangladesh. This small but densely populated country, once seen as a basket case, is about to teach the world a lesson: it will achieve total sanitation by the year 2010, fifteen years ahead of the deadline set by the Millenium Development Goals.

Two intelligent strategies are responsible for this admirable progress: **a)** emphasis on the demand side with a strong nationwide campaign for total sanitation and banning open defecation very effectively, and **b)** by stimulating a vibrant private sector of some 10,000 small workshops that produce sanitary latrines of different types and at quite affordable prices.

This publication analyses the secrets behind the sanitation miracle in Bangladesh and describes the methodologies of marketing and of total sanitation. It also looks at experiences in other countries (Ethiopia, India, Switzerland and Vietnam) and provides a methodological help for practitioners who want to promote and implement sucessful market-driven sanitation strategies.