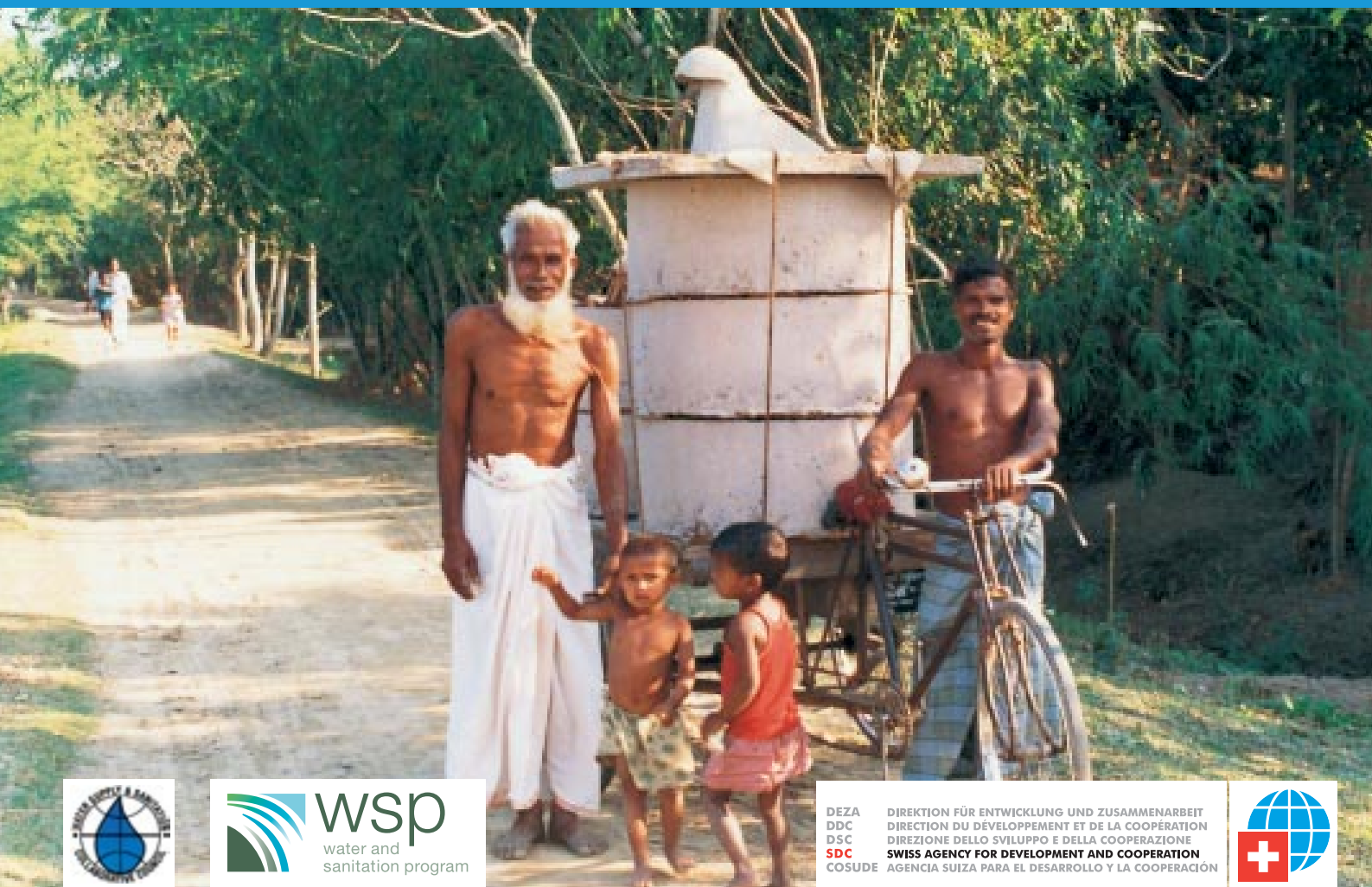




# Sanitation is a business

Approaches for demand-oriented policies



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Customers in a Sulabh  
community latrine, India



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Front cover, top:

Delivery of latrines for the Engadin ski marathon with 25,000 participants

Front cover, bottom:

Delivery of latrine components by rickshaw in Bangladesh. The latrine consists of 5 rings (to be sunk below ground) and a water-sealed platform (shown upside down in the image)

Back cover:

A large public toilet complex – the largest in the world – at Shirdi (India), a centre of pilgrimage. The complex is run by Sulabh and has a daily capacity of 50,000 users.

# Sanitation is a Business

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## Why this Brochure?

**In 2000, around 1 billion urban dwellers still lacked adequate sanitation and hygiene. The corresponding figure in rural areas was even higher. Yet practical examples from all over the world increasingly demonstrate that sanitation is good business, and it is often of most benefit to the poor. This is a strange contradiction, and one whose resolution has far-reaching potential when working towards the Millennium Development Goals (MDG).**

### Silent Suffering

At any given moment, almost half of the developing world's people are sick because of unsafe water and sanitation.

Source: WSSCC, 2003

### Sanitation: still largely neglected

Sanitation is a neglected topic and should be put much, much higher on the agenda of donors and governments. People do not want to talk about hygiene and sanitation; such issues are not popular topics for public debate. This is one of the reasons why around 1 billion people are currently living without access to adequate sanitation. The global consequences in terms of debilitating disease and loss of human life almost defy the imagination.



Hygiene and sanitary facility in a village in Bangladesh

### The Global Disaster

Try to imagine a jumbo jet filled with children, crashing without survivors, every hour. Would this be acceptable to the world? And yet, every hour around 400 people – mainly children – die from a lack of clean water, sanitation and hygiene.

as a goal (see the Bangladesh case). Today, the concept of sanitation is known practically all over the world. However, the “top down” approach of distributing latrines with subsidies (sometimes even distributing latrines free of charge to beneficiaries) has not worked.

Taking a safe lower limit of USD 20 per capita for providing sanitation services only in urban areas, the estimated capital requirements are around USD 10 billion for the poorest urban areas of Asia, Africa and Latin America. This means that current responses would have to be scaled up by a factor of 100 or more if services are to reach those in need before 2015. (figures from Bhatia and Hansen, 2000).

### A need to recognize the importance of sanitation and hygiene

Paradoxically enough, and in sharp contrast to this substantial neglect, the relationship between sanitation, hygiene and human health has been known about since Robert Koch (1843–1910) discovered that bacteria were a source of infectious diseases. The World Health Organization (WHO) estimates that the global incidence of

### Achievements so far

Public programmes for latrine construction have had an impact in the past, but this impact probably has less to do with the provision of sanitary hardware than with the promotion of sanitation



Subsidized latrine programs did not always respond to the demand (mid 90ties, Bolivia); this latrine is used as a storage room by the owner who left the village as seasonal worker



Hotspots of the global sanitation challenge in densely populated urban areas (Madagascar)

diarrhoeal diseases can be halved through a simple gesture: hand washing with soap at critical times. Since sanitation and hygiene measures should go much further than hand washing, opportunities for comprehensive progress are huge.

Poor sanitation also has an economic impact. It is estimated that hygiene-related illnesses cost developing countries around five billion working days per year – a statistic that largely concerns the poor who also lack adequate sanitation. This is a significant economic loss. Studies have shown that in Peru, every case of diarrhoea costs the public health system 12 USD, and this is money that could be better spent in prevention (Source: WSP Peru 2003). With the appearance of SARS and the avian influenza, public health authorities have recently become more aware of the major economic losses that epidemics can cause: the decline in tourism and business travel alone can be enough to bankrupt airlines, and entire sectors of economic activity (tourism, export trade) can be severely damaged.

### Involving the private sector as a partner

How can the sanitation challenge be met? One plausible approach includes involving the private sector as a partner. The role of the public sector could then focus on demand-orientation, market creation and on an enabling environment favouring the private sector to deliver on the supply side. This private sector – be it big business, or a myriad of small enterprises stretching from plumbers to latrine-makers – has always

existed, but it has remained in the “shadow” of sanitation policies. Integrating the private sector with a “sanitation revolution” would add much needed dynamism to the challenge of meeting the millennium development goals. To simply continue as normal until funds for public sanitation programmes are doubled is a rather fatalistic approach. It is also clear that this measure alone will never be enough. Investments in school latrines will always be a task of government. However, the proposed new allocation of roles between public and private sectors will ensure that greater leverage be obtained.

NGOs play an important role in organising communities. As the partners of Governments, NGOs can play a very important catalytic role in creating awareness, in conducting and implementing social mobilisation campaigns and similar activities. There are many cases where NGOs have successfully opened up sanitation markets for the private sector, for instance in the cases of Midnapur in West Bengal, or in Bangladesh.

But NGOs cannot do the job alone – their capacity is largely constrained by the total funds that are available to the public sector, and this is not enough. NGOs are complementary to a business-minded private sector that is interested in obtaining loans to construct sanitation facilities and that is willing to take the financial risks that make things happen.

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### The importance of sanitation and hygiene

Despite epidemics in many European cities, many doctors did not believe that cholera was contagious. In Hamburg, the main traders feared that their businesses would suffer if it became known that the city was suffering from a severe epidemic. The discoveries by Robert Koch and Louis Pasteur that the spread of the disease was due to a microorganism which could be transmitted in contaminated water or food, led to a new public health paradigm. Infected patients were to be quarantined, water and milk were to be boiled, hands were to be washed, and cleanliness was to be pursued everywhere: a vast territory for action.

Source: R. Evans

## Time for a Paradigm Shift

**Until now, sanitation has been seen as an unpopular “obligation”, a headache and an unwelcome burden for more successful water programmes. But the case for meeting the Millennium Development Goals (MDG) in sanitation is overpowering and can only be achieved if the private sector becomes more actively involved in sanitation. Under the new paradigm, sanitation has to be seen as an opportunity – actually, as a business.**

**This is not “the” answer to all problems; it is a new look at an old problem. It stems from the idea that people have desires, they dream of cleanliness, they don’t want to be looked at as being dirty, and their desires are a strong change agent to be mobilised.**

### Epidemics and “laissez faire”

In the past, many politicians have reacted to epidemics in similar ways – “take a broom and sweep it under the carpet”. The SARS and “avian influenza” outbreaks are recent examples of this tendency. The cholera epidemics in the city of Hamburg between 1830 and 1892 are notorious: for many years, the mayors of Hamburg – an aristocratic group of honorary gentlemen – denied that the city “had a problem” and pursued a policy of “laissez-faire”. In August 1892, over 7,000 new cases were reported, and the hospitals and cemeteries could not cope with the patients and the deaths. The cholera outbreak was so dramatic that a new policy of hygiene promotion had to be adopted, on the initiative of the far-sighted Senator Hachmann and Prof. Robert Koch, the scientist who had discovered the cholera bacteria.

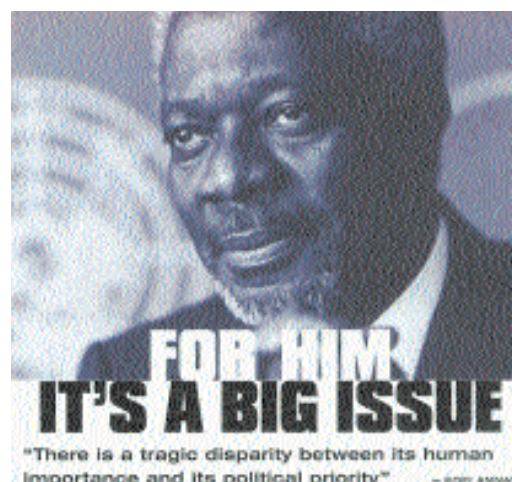
### Histories, age-old beliefs

Top-down approaches, based on the conviction that poor people have “to be told” to practice hygiene and must “be given latrines” will not succeed. It is an unacceptable prejudice that poor people are unconcerned by their own hygiene. Most people know exactly what they want. They aspire to cleanliness, comfort and a better life, and this can be converted into a demand.

It is a proven fact: even poor people are willing to pay for hygiene and for suitable services. All over the world, an increasing number of businesses – sometimes very small – are making a living from sanitation. As they do so, they are providing a good service to their customers, who are often poor people. Sanitation is an opportunity for both the user and the provider.

### The old paradigm

The old paradigm that has been holding sway throughout recent history is one of public neglect. Although some political leaders (like Nelson and Graca Mandela, or Kofi and Nane Anan) have spearheaded new campaigns to make sanitation a top priority, we still need much more involvement and commitment from politicians and donors. This is one of the reasons why the WSSCC has launched the WASH campaign. This campaign aims to bring water, sanitation and hygiene back into the limelight of public debate. The old paradigm is also characterised by neglect from a public health perspective: the budgets for sanitation are low (“they will never be sufficient anyway”) and the quality of goods and services is correspondingly poor. Low investment leads to low performance, and those in charge



of sanitation in ministries find themselves trapped in a constant battle against frustration and pessimism. This has created a climate of resignation in response to the enormous task that lies ahead.

Available public funds are invested in subsidies: the resulting services are of poor quality but free, and the subsidies are only given to a few because such resources are not boundless. In short, the old paradigm is a vicious circle of inadequate resources, failure, frustration and pessimism.

### A new paradigm

The promoters of the new paradigm are not suggesting a “laissez faire” policy that abandons the responsibility for managing public health to the private sector. Rather, the new paradigm is built on two pillars:

1. A drastically more active public health policy which puts water, sanitation and hygiene very



high on the political agenda, but where the focus should entirely be on the demand side, on market creation and on the enabling environment. Instead of providing top-down solutions (with “one-size fits all” subsidies), Governments and civil society should actively work together to promote the creation of markets for sanitation and hygiene. This can be done with social mobilisation campaigns and/or financial incentives (intelligent subsidies) to invest in sanitation. Both instruments should focus on (a) encouraging desirable behaviours and attitudes (the “carrot”), and (b) discouraging bad practices (the “stick”).

Public investments such as costly sewage systems should be made in a form which encourages the private sector in the best way.

2. A radically more active involvement of the private sector on the supply side is needed, to deliver creative and innovative solutions that provide better services for all customers, including the poor. The private sector can also play a major role in demand creation with innovative marketing campaigns and communication strategies.

Private entrepreneurs must be invited to see the water, sanitation and hygiene sector as an opportunity for good business. Accordingly, they will invest in these “new” markets, designing new products and services that fulfil the dreams of people, and which respond to their needs.

### **Intelligent subsidies are the key, not neo-liberal dogmas**

Market forces will not resolve the problem of sanitation without external prompting. And private enterprise responding to the demands of poor people is not some new form of exploitation, as committed development advocates sometimes argue. Public sector action is often characterised by free or subsidised service provision of a uniformly poor standard. The private sector can provide better, more diverse services and results, where people can access the services they really want at prices they are willing and able to pay.

Subsidies are essential and will continue to be needed for a long time; however, they should clearly target those who cannot pay for even



Small enterprise, producing latrine components (water seals) in Bangladesh: an effective partner for a sanitation revolution

basic services, and they should take a form that respects their real needs. Poor people, like others, should be seen as customers with a right to demand, and not as beneficiaries having to accept what ever they can get.

Many of the positive examples in this brochure have been heavily subsidised. Perhaps social mobilisation campaigns – as in Bangladesh – have been promoted by donors, the Government and by NGOs. Or perhaps water for the rich has been taxed and the resulting revenue has been re-distributed as subsidies for the poor (as in Burkina Faso and Bolivia). Public investments in school latrines are an effective way to promote sanitation and hygiene for the next generation.

“Free” goods that are unavailable in practice (because funds for subsidies have dried up) help nobody. If subsidies are given, they should support the “start-up” of activities, but in a way that ensures the continuation of activities once the subsidies are withdrawn.

### **Not a neo-liberal ideology**

This new paradigm is not a naïve neo-liberal ideology that believes in the “miracles of the free market”. The authors are aware that markets for hygiene and sanitation will not evolve automatically. The new paradigm advocates in favour of a strong state (as regulator, as promoter) that is able to manage the energy and creativity of the private sector to provide sustainable and demand driven solutions – in response to one of the most striking public health scandals of today’s world.

## Scope of the Brochure

**This brochure summarises case studies that have been taken from all over the world, showing that sanitation can be a viable business. It seeks to motivate policy makers and donors to embrace a new paradigm that advocates for a strong state, managing the potential of the private sector to provide sustainable and demand driven solutions to sanitation needs.**

### A poverty focus

Services for the poor should not be “poor services”, as is often the case when services are provided for “free”. What is more important is that they are desirable, accessible and affordable. Under the new paradigm, numerous jobs are created for small businesses.



Poor people – in this case producers of clay rings – benefit most from the sanitation revolution (Bangladesh)

### A global business case

This brochure is a first step towards a new approach, showing a variety of different best practices. It tries to establish links to a global business case and to the case studies on water and sanitation that are being edited by the Norwegian Ministry of Environment and others, in preparation for the Spring 2004 meeting of the Global Commission on Sustainable Development (CSD).

Not surprisingly, many of the case studies that are described below would benefit from more in-depth analysis. However, this does not weaken the positive value of the conclusions drawn, with respect to the significant potential of demand driven models to achieve the MDGs in sanitation.

### A poverty focus

Clearly, it is possible to base a business on the need for sanitation and hygiene in the North. The case studies show that this also holds true in the poorer countries of the South, sometimes even under extreme circumstances.

This brochure adopts a strong poverty focus, but the recommendations are also meant to be useful in transition countries. The majority of businesses that generate income from sanitation are small enterprises, some coming from the informal sector. And it is the poor who stand to benefit most, if products are affordable and adjusted to their demands.

### Learning from case studies

Some of the principles which are demonstrated in the case studies from the North are valid for developing countries as well.



Why not look at success stories in industrialised countries too? (McClean®-toilet at a railway station)



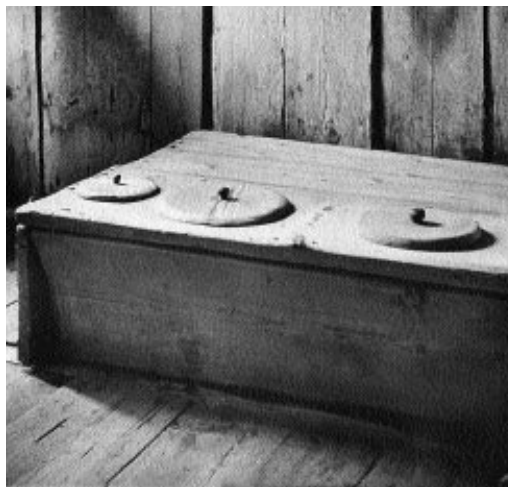
## Demand – Somewhere Between Desires and Obligations

**The demand for sanitation is built not only upon gentle coercion (obligations) but also upon people's desires. The business sector cannot survive without cultivating and responding to this demand. If private businesses can cater to the needs of poorer customers as well as meeting the demands of wealthier groups, the business community can become one of the key partners to reach the MDG in sanitation.**

### Demand and behavioural change

The characteristics of demand in sanitation are complex and overshadowed by cultural taboos. People are used to talking about food, but not about excreta. And although everybody in this world prefers a clean environment to a dirty one, hygienic attitudes are not always evident.

Demand may also depend on behavioural patterns. For instance, people in India prefer open defecation because they do not want to pollute the vicinity of the house; they perceive a latrine as a source of pollution, especially, if it is close to the kitchen. But such attitudes and perception may change, mostly due to social influence. Adopters of latrines in India – having reversed the perception of what is “pure” and what is “polluted” – have strongly influenced their neighbours. Similarly, one reason why we wash ourselves every morning is the pleasure we derive from feeling “clean”, but to a great extent we are



Cultural preferences are sometimes surprising, particularly in sanitation: family toilet in Bavaria

also influenced by social factors. Nobody wants to smell of sweat or dirt and give a bad impression. Prestige and social pressure are absolutely crucial motives for sanitation and hygiene campaigns.

Once demand for latrines is created, an opportunity has arisen for the private sector to design, make and deliver a solution that fully satisfies this demand. If the customer is poor, then the product must – above all – be modestly priced. If the customer is wealthier, then the product may be of a higher quality and a better design. There is never only one solution: it is not true that “one size fits all”.



The demand for such toilet chairs was high in the 19th century when water closets were still a luxury

### Why not family toilets

Centuries ago in rural Bavaria, latrines were the place where the family met for a chat. Desires and standards only changed when the concept of privacy was introduced, sometime during the 18th century.

### Behavioural change

How many times a day does a mother need to tell her child to wash hands? It is easier to throw a paper on the floor than to walk to the next paper bin.

## During Goethe's times

Hygiene and sanitation were only problems in densely populated areas and grew to epidemic dimensions with rapid urbanisation. When Goethe travelled to Italy and asked where he could go for a call of nature, the answer was: "tutti gabinetti", which means wherever he wanted, in the open field.

## Water closet, a royal gift

In Germany, the first water closet was installed in 1860 for the visit of the Queen of England to the castle of Ehrenburg.

## Early markets – historic views

It is apparent that latent demand is not sufficient to unmask the full extent of opportunities for the private sector in the South. It is also clear that the small-scale private sector in the South does not have the capacity to widen markets for sanitation and hygiene. Small-scale businesses and pro-poor business models will only emerge if a corresponding market is visible.



Such nicely decorated water closets (19th century) were affordable only to the richest of the rich

It is also obvious that the first customers for sanitation products will not be the poorest: the first water closet was made by Sir John Harrington for Queen Elisabeth I, and the best markets for luxurious bathrooms were the palaces of the aristocracy.

## Social change, development of standards

However, once the Queen had a loo, the common man (and even more so, the women) did not want to be deprived of the comfort, the privacy and the well being that modern technology could offer. In Europe, the market for bathrooms grew rapidly at the turn of the 20th century. In 1910, 28% of the newly built apartments in the city of Zürich had a bathroom; in 1920, this figure had risen to 36% and in 1930, it was over 60%.

These markets were created in Europe through two major developments:

1. At the end of the 19th century, and as a result of cholera and typhus epidemics, more severe public hygiene practices and standards pressured people to change behaviours. It became a legal obligation to include decent latrines and bathrooms with houses.
2. At the same time, electricity, gas and piped water became available to the middle classes and were gradually introduced as a matter of prestige and comfort in more and more houses.

These developments opened up new markets for a wide range of hygiene and sanitation enterprises, and eventually grew into an important economic sector. An industry specialising in pipes, joints and fittings evolved, the plumbing and construction sector flourished, and hotels, baths and spas attracted rich tourists from many parts of the world.

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## Creating Markets for the Poor

**The logic of creating markets for sanitation is similar in the South and in the North. However, although the markets of the poor are huge, they are not easy to tap. Governments, NGOs and civil society can play a very important catalytic role in awareness creation, in conducting and implementing social mobilisation campaigns and similar activities.**

### Success stories

The examples in this brochure show very similar trends and market creation patterns. In particular, the Bangladesh case shows that it is possible to create a thriving market for all types of latrines through a social mobilisation campaign with the following characteristics:

1. A strong public campaign to encourage desirable behaviour, presenting a latrine as a symbol of prestige, comfort and privacy. The same campaign discouraged unhygienic practice, creating strong public aversion to the "hanging latrines" over water ponds.
2. The involvement of a dynamic and competitive sector of private latrine producers, marketing different types of latrines to different customer segments. The range stretched from very simple and affordable options to very prestigious alternatives.

In a similar way, the case studies in Burkina Faso and Bolivia show how such markets can be created through financial incentives and intelligent subsidies.

### Market potential in poor areas

Usually, marketing is focussed on the more affluent parts of a society, but the number of affluent people is small. For multinational companies, the advancing middle class is the key target – a larger market segment with the purchasing power to afford more expensive products.

However, it is a reality that the poor far outnumber the rich, and the poor all have desires, dreams and needs too. In a country like India or China, the rural markets are huge, but innovative new marketing strategies are needed to develop and tap them. Hindustan Lever (see below) has pioneered rural marketing strategies that even involve poor women from Self-help Groups as mini-retailers in supply chains for soap.

### Innovative solutions, where there is a demand

The private sector performs best under competition. It is therefore very important to avoid the distortion of markets and to encourage competition. Technical standards should be set in such a way that not only one supplier can provide the required quality.

If the private sector is to demonstrate its creativity, competing models at different prices should be allowed. There is no "one size that fits all". Unfortunately, technical standards are exaggerated in many donor driven sanitation programs, with expectations elevated so high that only a few suppliers can qualify. This is a killer for mobilising private initiative. An important principle ignored by many sanitation engineers is the need to "design to price", i.e. to ensure that the best sanitation (from the consumer's point of view) is made available at the price the consumer can afford.

However, it is the role of the Government to act as a regulator and to set adequate safety standards in order to protect the environment from pollution.

### Hotspots in densely populated areas

Sanitation and hygiene are essential in densely populated areas. New solutions are therefore most urgently required in rapidly growing urban areas, or in densely populated rural areas. In Asia, many regions are very densely populated but still maintain a very rural appearance: cows, camels, people, cars, dogs and chickens share the same spaces.

#### Sources:

- Dyalchand, A. et al., 2001: Promoting hygiene & sanitation behaviours – a manual for programme planning in rural India. Institute of Health Management, Pachod, India.
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### Private Sector as Partners of Vision 21

Building on people's energy and creativity at all levels is one of the core elements of the WSSCC's Vision 21. This measure helps to make water and sanitation services sustainable.

### Household Centred Environmental Sanitation (HCES)

People are at the centre. Issues should be addressed at the lowest possible level (household, neighbourhood) and only referred to the next level if solutions cannot be found. Individual solutions, to satisfy criteria of demand and affordability, are important.



## Development of Supply Chains

**Eradicating diarrhoeal diseases is not a task that can be completed in one or two years; it is the challenge for a generation at least. And demand and supply must increase in step with each other. How can such coordinated growth be achieved? What is needed is the development of a prosperous, sanitation business community.**

### Sanitary business in Switzerland

SUISSETEC, a 110-year-old sanitary trade association, counts over 12,000 registered employees, of which 1,000 are apprentices: The estimated net income (salaries) of this workforce is roughly 1 billion Swiss Francs per annum.

### Profitable supply chains guarantee continuous supply

In developed countries, the markets for sanitation and hygiene are reaching saturation. Nevertheless, the sanitation and hygiene sector sustains itself through constant innovation and aggressive marketing. In looking for new clients, the sanitation business has diversified with "jacuzzis" or "whirlpools" into the still growing "wellness" markets. The soap and cosmetics industry is also constantly positioning new products into markets that are already very competitive.



A sanitation outlet in the North (Switzerland)

In comparison, the markets for sanitation and hygiene in developing countries appear to be almost endless. Once the "affordability" barrier is crossed, demand can grow more or less continuously. However, the maintenance of profitable and performing supply chains is a real



A sanitation outlet in the South (Mozambique)

challenge. Usually, plumbers and masons in the South are semi-skilled, they have low status and they work mostly in the informal sector. This means that they cannot create markets on their own, but if there is a demand, they can deliver goods and services at very low costs.

### Maintenance of demand

Behavioural changes need time; they are social processes that require collective action. It is not possible to change intimate attitudes in one step and only through rational means.

For social mobilisation campaigns to be effective, they must be astute, continued and repeated. Usually, a lot of energy is released after any epidemic, since this serves as a rude wake-up call for civil society and public authorities. Today, Surat is considered to be one of the cleanest cities in India, after it got such a bad name when the plague broke out in 1994.

How can the drive for continuous campaigns be maintained? This is only possible through public pressure and lobbying, through campaigns such as the WASH initiative of the WSSCC.

### **A small-scale sanitation entrepreneur who taps the rising demand for latrines in Vietnam**

Nguyen Tan is a 58 year-old man, with thirty years of experience working as a small-scale private mason. Mr. Tan is married, with 4 children: he has 3 sons and 1 daughter. All of his sons have followed in his footsteps, carrying on the family tradition by becoming masons themselves.

Due to limited work opportunities in his home village, Mr. Tan had to work as a migrant labourer on short-term contracts. This line of work only allowed him to come back home for a few days every 2 or 3 months.

In December 2003, he was invited to attend a workshop organized by International Development Enterprises (IDE), an international NGO that promotes small-scale private sector development and stimulates demand for sanitation through rural marketing. The workshop targeted masons like Mr. Tan and was aimed at improving local techniques for building hygienic latrines.

Once IDE had started to create a market for sanitation, it did not take too long for Mr. Tan to realize that local demand for latrines was increasing – not only in his commune but also in neighbouring areas. He thought that the semi-septic tank model promoted during the workshop would become a “hot seller” in his area, because of the benefits it had to offer such as convenience, hygienic design, and reasonable prices.

Realizing that the construction of the semi-septic tank requires a large amount of concrete, Mr. Tan decided to start his own concrete business to meet the rising demand. He purchased iron to make a ring mould, hired a venue for business transactions, advertised his concrete rings, and started building “ringed” latrines.

Recently he was invited to attend a village promotion meeting, to talk about the techniques of building this type of latrine. After the meeting, 25 out of 40 participants decided to place latrine orders with him on the spot. The rest of the participants said they would discuss the expenditure decision with their family and would place an order later. Given short-term cash constraints from his potential customers, Mr. Tan has only built 50 latrines in 3 months, yet he remains confident that many more people will come back soon after the peanut harvest in April.

It is important to note here that as a businessman, Mr. Tan believes in after-sale service. He said: “My customers are my neighbours and village-fellows, so I feel responsible for doing a good job”. He also offers a guarantee on his sanitation products for 6 months from the time of purchase. He believes that the “quality of the product and the prestige of his service should come first”.

Mr. Tan is very optimistic about the future of his sanitation business. He has plans to expand his business by selling a large quantity of latrine rings and to build latrines regularly. He will hire 2 more workers and recruit one of his sons from the city to help him with his business. Life is much better for him and his family now. He does not have to travel far from his family to earn a living. During an average month, he believes he can make about 750,000 VND (or USD 48) more than he could earn before he started the new business – more than doubling his monthly income. Additionally, he has work all year round, both in dry and rainy seasons, which provides a consistent income for his family.



### **Size and scope of the sanitary sector**

It is difficult to estimate the economic importance of the sanitary sector. Plumbers install water pipes, toilets and bathrooms, but they also install gas pipes, heating and cooling systems. Producers of fittings and tiles supply bathrooms and kitchens, but also shops and restaurants. The industry incorporates manufacturers of ceramic tiles, ceramic toilet products, and a very decentralised trade of plumbers, masons, tile-layers and sanitary installers.

In a broader sense, it also includes the soap and cosmetics industry, the perfume industry, manufacturers of toilet paper and diapers, sanitary towels, tampons etc.

## Sanitation was a Business 2000 Years Ago

Perceptions, practices and behaviour in sanitation changed significantly over centuries and across cultures. What remained is the people's desire for cleanliness, hygiene, and comfort. This desire, sometimes even for luxury, is the basis for making business with sanitation. Historic examples invite reflection on some of the key issues.

### "Latrines"

Comfort and luxury were always close to sanitation. The term latrine originates from the roman term "latrina", which was a short form of the roman "lavatrina," the washroom.

### Community latrines 2000 years ago

The public (community) latrines used by the Romans needed access to water and drainage. The design was simple, normally consisting of a row of seats made from marble or limestone. The faeces fell down to a drainage canal that was periodically flushed.

With the expansion of the Roman Empire, this concept of community latrines became a standard – not only in Europe, but in the Near East and in North Africa as well. Archaeological excavations show that many of these facilities were decorated with ornaments, water games and sculptures.

Privacy was not needed. On the contrary, many of these latrines were meeting and chatting points. The clientele would sit together in a circle, engaged in conversation and debates; this custom is documented in various wall paintings and text fragments.

### Fortuna, operation and maintenance

Fortuna, the Roman goddess for all aspects of health and well-being, often appeared in the paintings of these latrines. Until the early Christian age, defecation was considered as an integral part of human life and nature and, therefore, subject to discussion and communal cultural practices.

According to historic research, these community latrines were managed and operated by "conductores foricarum". These were people who had a kind of lease arrangement with the State and who were authorised to collect fees from clients using the latrines.

### Roman Community Latrines

"Visire tacite, Chilon docuit subdolos" was found painted on the wall of a public latrine in the Roman city of Ostia. The translation is: "The cunning Chilon is teaching us how to fart without noise."



Latrinae publicae

Community latrine in Dougga, Tunisia: constructed by the Romans in the first century A.D.





Roman coin

The Roman emperor Vespasian introduced a tax on urine. Sanitation was money

### **Pecunia non olet – money does not stink**

“Gastrum urinarum” (urine containers) gave men the opportunity to urinate in the public free of charge. Craftsmen from the wool and leather industries put amphorae with broken tops at the doors of their workshops into which men could urinate. The urine was then used to clean wool and animal skins. Urine had an economic value. This practice was even considered as a potential for generating public income. Contemplating a tax reform, the Roman emperor Vespasian (69–79 A.D) wanted to tax these urine amphorae. For this, he was criticised by his son, Titus.

The historian Sueton documents the reaction of Vespasian: Vespasian put the first coins of this tax under the nose of Titus and asked him whether the money had a bad odour. When Titus responded that it did not, Vespasian mentioned: ...and yet these coins are derived from urine.

This story leads to the well-known quotation: “pecunia non olet” – money does not stink.

### **Relevance of this case for MDG discussions**

The service of sanitation can be offered in many different ways and forms. Even in ancient history, faeces and urine were not always considered as “wastes” but as potential sources of wealth and revenue.

### **Lessons learnt for policy making**

- Sanitation can be subject to a cultural dialogue. In many cultures, adequate sanitation is a traditional part of health and well-being and is associated with cleanliness.
- Taxing urination and defecation in public places seems an exotic idea today, but the notion goes back as far as Roman times.

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Perfume bottle from the 18th century

### **Masking bad smells with fragrance**

Perfume was not a solution to sanitation and hygiene problems. But it made the omnipresent stench more bearable. The French perfume industry started to boom in the 18th century and has, since then, developed to a multi-billion business.

## Sulabh Community Latrines: 12 Million Customers Daily



Sulabh toilet complex in Goa

Every day, Sulabh provides sanitation to 12 million people and charges a small fee, demonstrating that even poor people are willing to pay to use a clean toilet. Sulabh is running over 6,000 community centers all over India, but this is still a drop in the ocean. The founder, Bindeshwar Pathak, says that over 150,000 such centres would be needed. The service is just breaking even, but now Pathak wants to create a new organisation that will allow him to expand further.

### Business approach

The Sulabh model is characterized as follows:

- Sulabh normally constructs and maintains the CTC for public use on a pay-for-use basis.
- Local or other sponsoring authorities provide the lands and funds for construction of these public toilets-cum-bathing facilities.
- Sulabh raises resources by charging the sponsoring authority 20 percent of the project cost as implementation charges.

### Relevance of this case for MDG discussions

When Bindeshwar Pathak wanted to relieve the “scavenger” caste from their horrible task of cleaning toilets by hand, he chose to deal with the poorest of the poor and with a group of people who were not only badly paid but also stigmatised and discriminated against.

The Sulabh solution of providing a clean toilet against a nominal fee has shown that even the poor are willing to pay for the use of a decent toilet.

However, despite admirably serving over 12 million customers every day, Sulabh has not found a miracle model to combine social service provision with profitable expansion. In its present stage, Sulabh community centres are just breaking even, and the expansion and scaling up is a new challenge.

### Lessons learnt for policy making

- Successful collaboration between the private and the public sector is possible in sanitation in urban slums and on their fringes.
- The replication of the model still largely depends on the willingness and motivation of the local authorities to invest into the construction of CTCs. This is a severe limitation with the Sulabh model.



A Sulabh complex in New Delhi with the founder, Dr. Pathak

Today, around 6,000 community toilets complexes (CTC) have been constructed. The monthly revenue per CTC is estimated as Rs 45,000 (900 USD), if at least 50 percent of the users make payments of Rs 1 per visit. Operation and maintenance (O&M) costs for each CTC is estimated at Rs 43,000. This means that presently, it is not possible to provide any money towards payment of interest and depreciation to cover capital costs.

The perspective is now to add additional plants that generate biogas from human waste. Today, around 2 percent of the CTC have such plants.

### Development of the business

As mentioned in the study of Bhatia and Hansen, Sulabh does not face legal problems in its work because the request for setting up the facility generally comes from the civic authorities. Collaboration between the public and the private sector appears to be one of the key factors for the success of the model.

Source:

– see Bhatia and Hansen, op. cit



### **Meeting Bindeshwar Pathak, the founder of Sulabh**

By Bernard Imhasly, correspondent NZZ, New Delhi

### **What does it take to make community toilets sustainable? India's Sulabh has done a great job but still teeters on the brink of profitability.**

Mahatma Gandhi once said that if he were to be reborn, he would want to be born into a family of scavengers. Such a rebirth would probably guide Gandhi to cross paths with Bindeshwar Pathak.

"Scavengers" is the name used in India to describe the untouchables of untouchables – night soil collectors who clean up the faeces from millions of Indian homes equipped with dry latrines. The caste system socially ostracises groups who deal with dead matter, be they pallbearers, tanners or sweepers. But even these people turn away from the "Bhangis", who clean the night soil away.

### **120 million Indian households have no toilets at all.**

In the great majority of rural households, people leave their homes at dawn – in rain or sunshine, cold or heat – in order to relieve themselves in the fields. In the small towns and cities of India there are around ten million homes fitted with dry latrines and serviced every morning by scavengers, who load the night soil into a container by hand, heave it onto their shoulders and then throw it into the next ditch or pond.

The logo of "Sulabh International Service Society" is made up of a woman with a metal container on one shoulder. The red "X" on the dirty container underscores the society's aim: eliminating the dirty work of scavenging.

The existence of Sulabh is the reason why a reincarnated Mahatma Gandhi might meet with Dr. Pathak. Pathak founded Sulabh in 1970, after having worked in a Bhangi colony, where he did research for his sociology thesis. The inhuman conditions inspired him to take up Gandhi's mission: to give the untouchables back their human dignity, by bringing an end to such dirty work. Pathak did not follow Gandhi's method of a political and moral crusade, which had culminated in the ban of the caste system in the Indian constitution. By the time Sulabh was founded, the constitution was already twenty years old, but the practice of scavenging had continued nonetheless.

Instead of appealing to human solidarity, Pathak developed technical alternatives for dry latrines. In so doing, he also found a way to address the wider issue of open defecation, which Gandhi had already openly criticised in comparing India with a large latrine. Given the population density of modern India and the growing stress on land and water resources, the open disposal of human waste – 850 million litres of urine and 135 million kilograms of faeces every day – is a major factor influencing the country's health profile.

34 years later, Sulabh has become India's largest NGO. It has built 1.2 million private latrines and over 6,000 "Community Toilet Complexes" (CTC). The technology is simple: the waste is washed off with 1–2 litres of water into one of two tanks, where the water slowly seeps off and leaves solid dung. What was revolutionary in Pathak's approach was his "delivery model". Unlike similar public toilets put up by municipal bodies, Sulabh's CTCs are backed by a workforce of 60,000 paid "social workers", who see to it that the toilets look clean and inviting to the 12 million daily customers. Instead of delivering a free service, which usually turns the State toilets into stinking sewers, the CTCs levy a small user fee. "I demonstrated that even poor people are ready to pay if they get a clean and safe environment for their daily ablutions".



The income generated is supposed to cover operating costs. “Sulabh”, says Pathak, “is proud of the fact that it has never accepted free money for its operations”.

As a result of this success, “Sulabh” (which means “easy to maintain”) has become a household word in India. However, new challenges are looming large – “we are still at the beginning of the beginning. We are a candle in the dark”, says Pathak. Experts estimate India’s need at 120 million additional private toilets and 150,000 CTCs if it is to attain minimal hygiene standards and remove the source of several fatal diseases. Pathak recognises the need for a change of pace and direction: “No doubt, we have to scale-up our services. With the present growth we will never attain the Millennium Development Goals”.

The product itself needs to be changed, too. There is little hope that the State will provide the country with a dense network of underground drains serving private flush-toilets. India’s urban Harappa civilisation may have had an underground sewerage system as long as 5,000 years ago, as Sulabh’s Toilet Museum in Delhi shows. But, says Pathak “the first modern sewer was built in Calcutta in 1870. Today, 134 years later, we have equipped only 232 cities with underground drains – out of over 4,700 towns, not to speak of villages”. Does this mean continuing with the Sulabh technology? “No, this is not an elegant solution. The waste still has to be evacuated from the chamber. It may be dry and hard by the time the trough is full, as well as non-smelling and a good fertilizer. But this will only be useful in the rural areas. But who will do it in the urban slums? The scavengers? No way!”

A possible solution can be seen in a prototype biogas installation at Sulabh’s headquarters in Delhi. The waste is slushed into a closed fermenting tank, and gas is piped away for lighting or cooking purposes, or for driving a water pump supplying the CTC. However, simple as such an installation might be, it raises the investment costs for toilets, and the savings on energy from the gas will not be enough to compensate for this capital outlay. The elasticity of prices for the primary service to toilet users is limited. “Maybe we could charge two rupees instead of one”, says Pathak, “but even that won’t be sufficient”.

Even the other income of Sulabh (the municipal authorities pay Sulabh a fee of 20% over and above the construction costs of a CTC) will not allow the generation of enough capital.

Pathak has decided to loosen the financial firewalls of his organisation against outside lenders/donors. A second institution, “Sulabh Sanitation Foundation”, will be given the mandate to take loans and grants from international bodies and Indian financial institutions. The foundation would finance not only the technological shift – the construction of CTCs running on biogas – but also the expansion programme. Sulabh will partner with an NGO in each of the 560 or so districts of India, and these partners will run local CTCs and maintain complexes in housing colonies. This change will call for the scaling-up of training and monitoring institutions within Sulabh.

Sulabh also wants to take a new look at its practise of financing existing CTCs solely the income of their operations. Pathak has seen what has happened under his nose in Delhi. India’s capital has over one thousand slums, and the combined effects of Sulabh’s CTCs (282 in the city) and the public toilets are not enough to draw people away from defecating in the open. The municipality has therefore allowed private companies to set up toilet complexes. It has also allowed them to lease the outside walls as advertising space. This proved to be a phenomenal success – and a humiliating defeat. After a Supreme Court order banning large advertising boards along the City’s streets, these toilet walls suddenly became hot property and gave the toilet companies a windfall of profits – far larger than anything they could earn from their primary (intended) service.

This toilet service soon proved ineffective. User fees were set too high to attract customers, and although such toilets mushroomed all over the city, they were located along the streets with dense traffic – not where they were primarily needed, namely in or around slums. On some stretches, one can find up to four toilets in one kilometre.

Sulabh wants to be where the need for sanitation is located. However, it looks difficult to use CTCs as advertising space in shantytowns – their inhabitants are not consumers of ice creams or Nescafé, they just need the basic service of going to the toilet. One such CTC lies at the entrance of a small slum called “Parvu Market”. The colony consists of several hundred huts, squeezed between an open floodwater drain and the walls of the South Delhi pumping station. No company wants to rent wall space here, because the monthly income of residents is not more than 1,500 Rupees (less than 30 Euros). Daily-wage labourers, coolies and rickshaw pullers live here, as well as temporary migrants who drift into the city by the tens of thousands every year.

## McClean®: Business at Railway Stations

**Mr Weisskopf is an economist and the founder of the Swiss company McClean®. Already in his childhood, Mr Weisskopf, liked clean and well-maintained toilets. To him, toilets were places to rest and relax. In 1995, McClean® opened the first two hygienic centres in railway stations in Bern and in Berlin. Carried by its clear focus on providing a high quality service, McClean® is rapidly expanding all over Europe.**

### Background

The birth of the business idea about 10 years ago was relatively simple; in search of new ideas and markets, Mr. Weisskopf had to travel through Europe to test toilets at railway stations. He was mandated by a ceramic factory, which wanted to learn more about opportunities for investments in public toilets.

What Mr Weisskopf saw was shocking: dirty public toilet facilities, with no safety for the customers, and with no service. During these visits, the business concept of McClean® was developed.



Reception area of McClean® hygienic centre

### Providing centres of hygiene and comfort

McClean® sets new standards in cleanliness, safety and high quality service in sanitation. Visitors to centres of hygiene should feel relaxed and comfortable. To achieve this feeling, Mr. Weisskopf is convinced that hygiene must be visible and tangible.

Therefore, McClean® introduced a retail marketing approach which has its price. Because the hygienic centres are spacious, sufficiently illu-

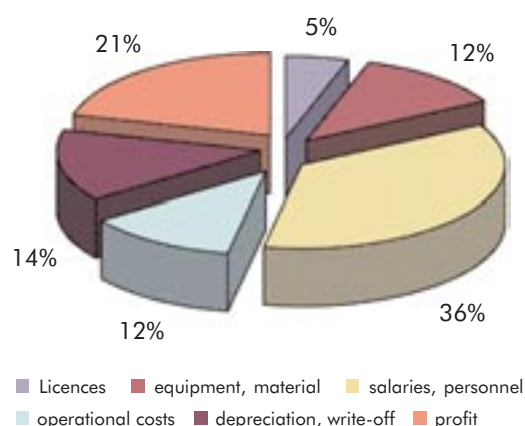
minated, and equipped with high quality installations, customers find themselves placed at ease in comfortable surroundings. McClean® offers more than just sanitation – customers can take a shower, and women find a place for applying their make up. Articles for personal hygiene – such as shampoos – are also sold.

Personnel permanently supervise the centres, and customers also find alarm buttons. This increases the feeling of being at ease, particularly among women. Small children and disabled people can enjoy hygiene and comfort tailored to their needs, free of charge.

### Figures, pricing

The average users of McClean® are: men's urinal (43%), men's toilet cabins (18%), women's toilet cabins (38%), shower facilities (1%).

Using McClean® is not cheap, but the socially acceptable alternative – to drink a coffee in a nearby restaurant and then use the toilet – is around 2–4 times more expensive.



Pie chart: Cost structure of hygienic centres

### Winning more customers

Mr. Weisskopf learned from personal experience that sanitation means business if service matches demand. His vision is to establish McClean® successfully in Asia, with an adapted approach.

### Public toilets in Zurich

100 years ago, there were no public toilets in Zurich although it is the largest city in Switzerland. The city police were tasked to ensure that open defecation did not have a negative impact on the "city image". Today, around 43 city employees guarantee the service of 92 public toilets, which are used by an estimated 1–2 million people (visits). In 2003, the service cost the taxpayer around 4 million Swiss Francs. As the toilet use is free, the only way to estimate the frequency of use is through the consumption of toilet paper; this explains the wide gap between 1 and 2 million users.



Close to customer needs

And people are apparently willing to pay – for sanitation services as well as for personal hygiene. Today, McClean® owns 22 hygienic centres, serving around 10 million customers each year. The company employs around 260 well-trained people.

## Development of the business

Business development is promising because the business concept is convincing. The opening of new centres is planned, and the McClean® brand has been registered worldwide.

Reaching the sanitation standards that European customers demand is not a low budget undertaking. The initial investment for the establishment of such a hygienic centre with around 20 toilet cabins, urinals, and 3 showers (on about 260m<sup>2</sup> in a railway station) is around 750,000 Euro.

Around 21% of the income of an average hygienic centre can be regarded as revenue generated for the company. Salary costs represent another 36%.

## Public-private partnership with railway stations

These relatively high investments are a limiting factor for business development. According to Mr. Weisskopf, McClean® needs locations at public places where there is a high frequency of passengers, such as railway stations. The passenger frequency at airports, for example, would be already too low to run a McClean® centre profitably.

Therefore, the establishment of partnerships with railway stations is important, with benefits for both partners. The public sector has to make the land and infrastructure available (not free of charge but for a reasonable price) and the private sector should provide the best service and maintenance.

## Relevance of this case for MDG discussions

Innovation, a clear business strategy, entrepreneurship, and the sensitivity of the company to demand are key success factors. Besides serving its clients, the company also has the capacity to satisfy its shareholders.

The principles underpinning the successful McClean®, business are valid for poor countries. McClean® is successful because customer satisfaction, the most important business indicator, is very high. Around 70 to 80% of the customers are very satisfied with the service and regularly use it.

## Lessons learnt for policy making

- Businessmen, from the formal as well as from the informal sector, must be encouraged to elaborate innovative concepts and models in response to opportunity.
- Public Private Partnership models are successful vehicles for addressing sanitation issues in places where the flow of potential customers is high.



Luxury toilets, to meet the demand at European railway stations

## How costly is the use of a toilet?

Is 2 Swiss Francs too much to pay to use a McClean® toilet? Or 1 Swiss Franc to use a McClean® urinal? Many people feel that this is costly. One alternative is to use the toilet of a restaurant and drink a coffee; but this will then cost a total of 3 to 4 Swiss Francs. What about the public toilets? If the City of Zürich spends 4 million Swiss Francs for 1–2 million users, then each visit costs the taxpayer 2 to 4 Swiss Francs. (1 USD=1.25 Swiss Francs)



## The Private Sector and Sanitation in Rural Bangladesh

**Until the mid-1990s, SDC, Danida and UNICEF supported around 1,000 Government latrine production centres (LPCs) in rural areas in Bangladesh. Latrine coverage remained at a low level, despite high investments. This situation changed drastically when a new approach was adopted – moving from a cheap hardware focus towards social mobilization, to create a market for private latrine producers. The latrine coverage increased rapidly, and thousands of new jobs were created in the private sector. Today, around 6,000 small rural enterprises produce some 1.2 million latrines per year.**

### Subsidized programme

In response to widespread need for improved sanitation in rural Bangladesh, SDC, Danida and UNICEF supported – until mid-1990s – around 1,000 Government latrine production centres (LPCs). These centres did their job with low motivation, without passion or marketing spirit. They were told by the Government and by the donors to produce around 200,000–400,000 subsidized water seal latrines each year.

Despite subsidised prices, sales were low and severe stock piling became one of the hallmarks of the programme. A conclusion began to gain acceptance that “people are not interested in latrines”, even if subsidies are increased. But, was this really true?

### A new approach

All this changed radically when a social mobilization campaign was designed and implemented by UNICEF and the Government of Bangladesh (GOB). This campaign aimed at positioning latrines as desirable products, increasing the prestige, comfort and privacy of customers.

Social mobilization in rural Bangladesh



The annual budget for this social mobilization was much lower than the combined donor/Government expenditure for the maintenance of the LPCs.

The impact of this nation-wide campaign was interesting. Stock piling in government LPCs worsened. At the same time, latrine coverage increased within a few years from around 25% to around 50%. Both effects had a common cause: small workshops in rural Bangladesh had become interested and motivated because producing and selling latrines had become good business, once the market had been stimulated.

### Mechanisms of private sector involvement

In rural Bangladesh, there are many small workshops that turn out cement or clay products, such as pots or parts for windows. More than 50% of these workshops operate with working capital of less than USD 20. Only 10% of them use bank loans or money from private creditors.

Before the social mobilization campaign, many of them did not produce latrine components. The profit potential was assumed to be negligible due to competition from the subsidised LPCs.

Today, private producers represent the sanitation backbone of rural Bangladesh. The social mobilization campaign had stimulated the market for their products.

Private workshops sell latrines at a price of around USD 10, and the annual profit may only be around USD 200–300 for a workshop. This seems like a modest sum – 1 USD per day. Nevertheless, this is substantial progress in rural Bangladesh.

### People's Desires

Rich people in Dhaka had a sumptuous bathroom next to every bedroom. Private sanitary shops sold colourful fittings, tiles and toilets to their more affluent customers. And how did the poor feel? Were they so very different in their desires?

### Millennium Development Goals

Observing the enthusiastic response to its renewed national sanitation campaign, the Government of Bangladesh (GOB) has set an ambitious target to achieve total sanitation by 2010. To achieve this, sanitation coverage has to be increased by 9% each year. This will imply the fabrication and selling of millions of latrines each year. Only the private sector has this capacity.

### Sanitation Coverage in rural Bangladesh

The Social Mobilization (SocMob) campaign was discontinued in 1997. This campaign led to drastic increases in sanitation coverage, but also assisted the spread of so-called unsanitary latrines. In 2000, around 47% of rural households still did not have access to a latrine. There is a strong case for involving the soap industry in a public private hand washing initiative.

### The challenge of the MDGs

In Bangladesh, it was realised that the MDGs could never be reached without drawing in the private sector as a partner. The social mobilization campaign was an ideal approach to make this happen.



Stockpiling in a Government latrine centre which was unable to compete with the mushrooming private latrine producers after the social mobilization campaign

### Was it the private sector or the government?

The creation of a market is a costly affair, and it would be an illusion to think that this is a task for small enterprises. Government involvement here was crucial.

The social mobilisation campaign had two main axes of intervention, based on a “carrot and stick” strategy. It made sanitation desirable for reasons of prestige, comfort and privacy (the carrot). And it discouraged bad sanitation practices and positioned these habits as socially undesirable (the stick).

The campaign worked with village leaders (mullahs, teachers) and involved the ANSARS, a group of village leaders consisting of about 400,000 people. These ANSARS – comparable to scouts in other countries – were motivated to use latrines, but they also destroyed the “hanging latrines” which were typically constructed over village ponds.

### Why did the private sector succeed?

Whereas the Government centres produced a single product to meet the quality standards that donors had requested during their annual review missions, private producers served different customer requirements in response to variations in demand. Some wanted a more luxurious model, others a cheaper one.

Where cheaper materials were used, private producers would offer warranties with fitting. The supply chain consisted not only of production workshops, but also of rickshaw wallahs to transport the rings and slabs, semi-skilled labourers to install them, and other workshops producing bamboo superstructures.

Another reason for the success of the private sector may have been that access to the subsidised products of the LPCs was not based on the type of straightforward business transaction that is familiar in any village market. Overall, the private sector was able to provide a clearer, broader, more comprehensive and better-customised response to the demands of end-users.

### Ups and downs since the mid-90s

Results are promising. It is estimated that around 1,000 of the 86,000 villages in Bangladesh have reached total environmental sanitation. This may not look so impressive at first glance, but “total sanitation coverage” means that every house has a latrine, and this is a remarkable achievement in a country where poverty is so widespread.

This is only a first step on the way to meeting the MDGs. At the Asian sanitation conference, the Government of Bangladesh concluded that a renewed and intensive social mobilization campaign would be required to further increase sanitation coverage. Campaigning started in earnest with the proclamation of a national sanitation month in October 2003.

Private producer, catching the customers of the Government latrine centres (Bangladesh)



### Create even more Jobs for the poor

The 6,000 rural sanitation workshops in Bangladesh represent probably one of the most important rural industries in this country. Would it be a good idea to create a public-private partnership with the cement industry? Each latrine consumes roughly one bag of cement, and this means a volume of some 50,000 tons per year. This is an opportunity for cement manufacturers to join the party and to support the production workshops with technology, training, product development, marketing and branding, but not with subsidised cement – which would distort the market.



Sanitary Shop in West Bengal

### Relevance of this case for MDG discussions

Successes are possible in rural areas where the population density is high and the latrine coverage relatively low. The impact of the first sanitation

campaign in the mid-1990s was impressive in many ways, including job creation in the private sector.

Government and donors should continue to open up markets for hygiene and sanitation through social mobilisation. The strategy should follow the lessons learnt during the micro-finance revolution: progress is not made by subsidising interest rates but by reducing transaction costs. This should make workshops more profitable.

### Lessons learnt for policy making

- Subsidised LPCs undermine sustainable sector development and are not needed.
- Phasing-out subsidised public latrine production, and stimulating the market for latrines can effectively lead to a sector revolution (more jobs, higher latrine coverage).

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### Marketing Sanitation in West Bengal: Rural Sanitary Marts (RSM) in Midnapur:

*"In 1993, when the Government of West Bengal accepted the challenge of replicating the Midnapur model across the State, the key tasks of marketing sanitation and meeting demand were delegated to a new and radically different institution: the rural sanitary mart.*

*A rural sanitary mart is a place that manufactures and sells all of the relevant components for building low-cost latrines. It offers a range of options designed to suit the pockets of all villagers. All options are water-sealed. As well as providing the squatting plates, pans, and traps, sanitary marts offer all kinds of items – soap, bleach, brushes – which relate to the improvement of hygiene and behavioural practices.*

*Sanitary marts also provide a focal point in the campaign to promote the construction of latrines. They are staffed by local people. Staff are trained at district or State level and are able to generate awareness, to stimulate demand, to offer after-sales help to users, and to train others in the manufacture and installation of the product. Sanitary marts are self-sufficient entities – part NGO and part private business – making modest profits and using revenue to pay incentives to village motivators who bring in new latrine customers.*

*There are now more than three hundred sanitary marts throughout West Bengal, co-ordinated by sanitation cells at district and State level. They are meeting the demand for sanitation in a far more efficient way than even local government ever could. As a beneficial spin-off from the sanitation programme, they are providing valuable employment to thousands of young local people, especially women.*

*The Rural Sanitation Programme in West Bengal represents a remarkable collaboration between State government, UNICEF, local NGOs and village communities. Access to sanitary latrines is now standing at 43%. In three or four more years, every family in the State will have access to safe sanitation. This program has already attracted visiting teams from around the world, and influenced national policy guidelines for India.*

*Whatever the local circumstances, it should always be remembered that delivery cannot happen without demand. Pepsi and Coca Cola have, through successful marketing, created a demand so strong that functional supply networks are operating in the remotest regions of Midnapur, and even the rural poor are paying for these products. Governments could take a leaf from this book: demand first – supply follows."* Excerpt from an interview with Chandan Sengupta, UNICEF New Delhi in WSSCC, "Listening", Geneva, 2004.



## Public-Private Partnerships focussed on hand washing

**Every hour, some 400 people – mostly children – die from diarrhoea. Growing evidence suggests that half of them would survive if hands were washed with soap at critical times. Changing behaviour is a challenge, but an alliance of public and private organizations can effectively target and implement large-scale hygiene promotion.**

### Central America

In Central America, a successful public-private partnership was established to promote proper hand washing with soap to prevent diarrhoeal disease. Previously, only 10 percent of the people in rural Central America had used soap properly, in other words (1) before cooking or preparing food, (2) before feeding a child or eating and (3) after defecation, cleaning a baby, or changing a diaper.

The joint promotion campaign by public health organisations and the soap industry had a significant impact, with another 10 percent of the people improving their hygiene practices.

The result was an overall reduction of diarrhoeal prevalence of about 4.5% among children under the age of 5.



Campaign in Latin America (e.g. Peru)

The world market for soaps and detergents was worth USD 88 billion in 2000, having grown by 29% since 1996. Markets for the “middle classes” are stagnating but there is a huge untapped market in rural areas and among poor people. For them, a piece of soap can save a life. The global market is dominated by a small number of multinational companies, all of whom have strong brand identity and enormous advertising budgets.

### India: Lever's rural marketing strategy

*Because the market for soap products is largely mature in developed economies and displays stagnant growth, global companies are turning their eyes towards developing countries or emerging markets. In principle, promoting the use of soap for proper hand washing should be a promising business idea for the soap industry.*

*However, tapping the huge rural market of the world's poor is a major marketing challenge. Hindustan Lever Limited (HLL) in India has set up a deliberate rural marketing strategy to reach out to over 700 million rural customers. This strategy differs substantially from conventional marketing approaches. Instead of centralising logistics by focussing on supermarkets, HLL has set up a very decentralised system of about 7,000 redistribution stockists covering about one million retail outlets. The distribution network of HLL directly covers about 50,000 villages, reaching about 250 million consumers.*

*In addition, an effective rural marketing strategy must address the issue of affordability; although poor people have the same dreams as the middle classes, their disposable income is much lower. They cannot afford to buy a one-litre bottle of shampoo in a single payment; they can only buy smaller portions.*

*HLL has realised that sales are depressed as long as the pockets of the poor remain empty and now tries to raise the incomes of rural families by incorporating rural self-help groups (SHG) into the marketing channel as “direct-to-home distributors”. The model consists of groups of 15–20 villagers below the poverty line taking micro-credit from banks, using the cash to buy HLL products, and then selling these products directly to consumers.*



Products displayed at Shakti Day

### Hindustan Lever's Shakti Project

Shakti is a programme to involve poor women as entrepreneurs in HLL's supply chain. If a woman joins a self-help group (SHG) for rural savings and credit, she can get a loan to buy HLL products for re-sale in the village. Started in 2001, the project already covers some 12,000 villages. So far, 2,800 women entrepreneurs have joined. A typical Shakti entrepreneur earns a sustainable income of over Rs. 1,000 per month (25 USD), which is double the average household income.

### HLL's "Lifebuoy" health and hygiene education program

"Lifebuoy Swasthya Chetana" is the single largest rural health and hygiene educational programme ever undertaken in India. The objective is to educate people about basic hygienic habits. Launched in 2002, the programme has now covered 15,000 villages in 8 states. It has already touched about 70 million people, imparting hygiene education to over 25 million children. The vision of this on-going project is to make a billion Indians feel safe and secure by focussing on their health and hygiene needs.

### Saving lives by promoting soap?

Another challenge in this particular marketplace is the need for communication to change attitudes and behaviours. Mass media only reach half of the rural population, so generating awareness means using unconventional means for passing on the message.

While traditional health education can raise awareness and inform, the addition of promotion can ensure needed and sustained behaviour

change. Public-private collaboration enables the public health agenda to be advanced by using the private sector marketing expertise of the soap industry. The approach takes into account consumer needs and motivations and then delivers carefully designed and targeted messages.

Formal and informal behavioural studies in the industrialised world have confirmed that hygiene is a problem everywhere, so hygiene has moved up the agenda of public health in the industrialised world.

### Hand washing behaviour is surprisingly complex

*This box may surprise those who assume that convincing people to wash their hands is a simple matter of informing them that they would become ill if they didn't do it. The facts are obvious; WSP studies on hand washing with soap show clearly that those who do not use soap to wash their hands after using the toilet report cases of diarrhoea five times more often than those who do use soap.*

*Why is this apparently simple message so hard to translate into behavioural change?*

*In India, there are a variety of cultural perceptions about what is "purity" and what is "pollution": "In rural areas, latrines are generally located OUTSIDE the house. This is due to the polluted status accorded to objects and places associated with defecation. At the same time, within the hierarchy of household spaces, the kitchen is considered as being (or needing to be) very pure. If the latrine is located close to the kitchen, then according to local beliefs, it has a polluting effect on the kitchen. This has resulted in a preference for open defecation by villagers." A subtle consequence of these beliefs is the need to "keep soap outdoors" (and not in the kitchen) and to use a separate soap for hand washing after defecation. The availability of water is also crucial and hand washing with soap after defecation in the open field is quite a difficult task. When soap and water are available at a place before entering the house, people are ready to adopt hand washing after defecation.*

*Now, if the task of hand washing is to be achieved for the three critical events (before eating or cooking, after cleaning up a child and after defecation), even simple questions such as "where should the soap be placed?" "how many bars of soap to use?" and "which water to use?" take on unexpected complexity. Source: Dyalchand et al.*

**Still a lot to do: Hand washing behaviour in different countries:**

Handwashing with soap by mothers	Ghana	Kerala (India)	Peru	Senegal
After using the toilet	37%	42%	6%	25%
After cleaning up a child	31%	25%	n.a.	19%
Before eating (mothers)	16%	11%	11%	30%
Before eating (children)	n.a.	n.a.	5%	4%
Before preparing food	n.a.	10 %	14%	n.a

Source: WSP

**The hand washing campaign in Peru**

In Peru, the „Alianza publico/privada para promover el lavado de manos“, started in May 2003. A preliminary study revealed a familiar picture:

a) A high incidence of diarrhoea among children (up to 27% in the 15 days preceding the interview).

b) Only 14% of mothers washed their hands with soap before cooking and only 6% after toilet use; only 5% of children washed their hands before eating and only 11% after using the toilet.

c) Every case of diarrhoea costs the public health system 12 USD; a 10% reduction in incidence would save 840,000 USD per year.

Source: WSP Peru

Hand washing initiatives making use of public and private resources are active in Ghana, Peru and Senegal. Ghana has launched a nationwide hand washing campaign using mass media and live promotional events. In Peru and Senegal, consumer research is guiding the design of promotion strategies.

By helping to relieve the burden of disease through the use of soap, industry can eventually benefit from market expansion. From the public health perspective, this is a win-win situation; market expansion generates sufficient demand to sustain commitment towards serving poor, high-disease risk populations.

**Lessons learnt for policy making**

A public-private partnership must be very carefully designed, the roles of each partner clearly determined and spelled out, the needs and expectations of each stakeholder addressed, transparency conveyed in all activities. A planned hand washing partnership was not implemented in Kerala, India, for example, because of (1) the socialist political tradition and negative perceptions of the multinational consumer goods industry in that State, and (2) the perception of Kerala as being a healthy state where hygiene behaviour was already well-practiced.

PPP programs need time and effort. Advocacy is needed at all levels. Building partnerships is time-consuming and requires champions within participating organisations. To have the initiative



open to all industries is a must but also a challenge, as competitors are not interested in sharing proprietary information.

In addition, initiatives need to measure their benefits in order to obtain and maintain stakeholder buy-in and resources.

**WASH campaign: Hygiene is more than just hand washing**

*Hygiene, with safe sanitation and water supply, is what transformed health and productivity in the industrialised countries. It is one of history's longest running scandals that the same thing did not happen long ago in other regions of the world.*

*In 2001, the Water Supply and Sanitation Collaborative Council (WSSCC) launched the Water, Sanitation and Hygiene for All (WASH) campaign, aiming to mobilise political awareness, support and action towards achieving the Millennium Development Goals. In an attempt to alter decades of neglect on key issues, WASH focuses on placing sanitation and hygiene centre-stage, alongside water. Only by addressing this 'holy trinity' is it possible to improve health, dignity, and quality of life for all.*

*Taps and toilets cannot improve health on their own. Better hygiene is what matters.*



### **Interview: Hand washing as seen by a soap manager**

We asked Mr. Julio Bermejo, Professional Relationship Manager of Colgate Palmolive, Lima, how he sees hand washing as a future business:

*"What was the primary motive for Colgate Palmolive to join the Public-Private Partnership for the promotion of hand washing in Peru?"*

"Diarrhoeal diseases are one of the primary causes of infant mortality, and it was for this reason that Colgate Palmolive Peru decided to participate in this initiative; we wanted – as is already happening in Central America – to emphasize the importance of correct hand washing in order to reduce the incidence of these diseases."



*"How do you see the development of the soap market for the poor people in Peru?"*

At present, we have a market that has been shrinking over the last year due to lower incomes. People have had to switch to cheaper substitutes with the same function – such as making the least cost choice between washing powder or laundry soap.

This initiative will help us a lot to develop the market for body soap, if we explain to people – and especially to the poor – the importance of correct hand washing and that the cost of prevention is much less than the drugs and the treatment needed to combat the disease".

*"What efforts are needed to convince mothers and children to use soap for hand washing at critical occasions?"*

"With respect to hand washing, we have used the word and the 'doing' to demonstrate the importance of 'how to wash the hands correctly'; this was supported by printed materials in a simple and direct language for easy memorisation and replication."

*"If your company has invested in the development of this market, when will you see returns from this investment?"*

"The strategies in the past have only led to a competition among the soap companies for the same customers. Efforts have never been undertaken to open up this market. If we are to measure the profitability of this investment, we should separate the social objective from the commercial objective. The indicators that will show the commercial success of the product/service are an increase in the penetration of soap in Peru, the increase of the market share of Colgate Palmolive within soap categories, the increase in the distribution of the 'PROTEX' brand and finally an increase in sales. The indicator which will allow us to measure the social objective is the reduction of diarrhoeal diseases due to lack of hygiene and deficient hand washing".

#### Sources:

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(see: [www.globalhandwashing.org](http://www.globalhandwashing.org))
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### How poor families calculate

In El Alto today, the connection fees for both water and wastewater services cost around 440 USD. This is less than the corresponding increase in the land value due to the connection. Subsidies to poor families are neither needed nor granted. But under special and donor co-funded programmes, poor families can extend their repayment schemes up to 5 years, with virtually no interest charges. In this way, piped water and sanitation services become affordable for the poor as well.

### Creating markets for sanitary businesses

3 months after connection to the wastewater system, 64% of the households had constructed their bathrooms or showers. This shows the market potential for sanitary businesses that develops around urban infrastructure projects.

### Condominial system

Condominial designs lead to substantial reductions in costs for water and sanitation services. Financial savings are of the order of 24% for the sewerage service and 40% for the water service.

## Sanitation as a Component of Urbanization

**Urban development in El Alto lies somewhere in transition, with districts split between rural and urban settlements. Demand for water and sewerage is high, even in poor areas. And people are willing to pay the connection fees and service tariffs. With the condominial approach, it becomes viable to connect also the poorer neighbourhoods. Urban development rapidly takes off once utility services arrive. These turning points are ideal stepping-stones for the local sanitation business. Many new houses have to be equipped with sanitary facilities.**

### Background

A single service provider has always delivered water and sanitation in the cities of La Paz and El Alto. Today, Aguas de Illimani (AISA) is a private concession. One of the objectives influencing the latest form of the utility was the need to maintain social justice. Revenue from wealthier areas of La Paz is used to subsidise tariffs in El Alto, where

concession. Tariffs are among the lowest in Bolivia. In the mid-90s, the WSP carried out a pilot project to test new approaches (condominial water supply and sewerage), with support from the Swedish Government. A larger public-private partnership project to increase service coverage in district 7 – funded by seco, the Swiss “State Secretariat for Economic Affairs” – is now in the offing.



Large parts of District 7 in El Alto is still not served by Aguas de Illimani (AISA)

many poor immigrants from the rural Altiplano live.

At the urban fringes, like in district 7, daily life is in transition between the rural and the urban. Urbanization rapidly gains momentum once houses and blocks are connected to water and waste water services. At present, settlement density in El Alto is not so high, which facilitates the construction of bathrooms. But as soon as the utility services arrive, the pressure on land increases.

Water and wastewater utilities are managed and operated by Aguas de Illimani (AISA), a private



10 years ago, this neighbourhood in El Alto was similar to the majority of district 7. Today, households are connected to services (condominial system), streets are paved, and most families have installed a shower

### Demand exists, but not enough volume for business

Demand for sanitation is high, even among new immigrants. A recently conducted survey shows that 95% of the families are willing to pay for connections – not only for water supplies but also for sewerage systems.

Is working in these poor neighborhoods a business for Aguas de Illimani? At the moment, this is certainly not the case, in the short run. But the company has an interest in setting the infrastruc-



Residents of District 7 clearly express the demand and their willingness to pay for sanitation

ture in place, knowing that – sometime in the future, when urbanization is complete – the people of El Alto will be good, reliable customers.

### Developing the market for sanitation

Certainly, this transition from rural to urban settlements accompanies behavioural changes. An average immigrant family coming from a rural area does not consume more than 20 litres of water per day. This is very low, and hardly justifies the construction of wastewater connections. Poor water consumption is a headache for the operator because wastewater channels lack proper flushing.

Hygiene education has had a substantial impact on investments in sanitary installations. Of the families in receipt of hygiene education, 70% subsequently constructed a bathroom or shower in their homes, compared with a corresponding figure of 35% when hygiene education is not provided.

Families building their own bathrooms spent an average of USD 400 on materials and invested 16 days of their own labour. These costs are substantial when compared with the average monthly income of 122 USD.

To facilitate this transition to sanitation, the WSP pilot project included a micro-credit line. Only around 25% of the families applied for credit, which was granted at a 32-months term and at a low interest rate. While this eased the payments for some beneficiary households, there is no evidence that bathroom construction rates were significantly higher in neighbourhoods where micro credits had been offered.

### Local sanitation businesses

The project also trained people in the construction of sanitary installations, providing some craftsmen with an additional source of income. The NGO Sumaj Huasi offers similar training programmes. In the last few years, 120 small enterprises have been trained.

Impacts are difficult to estimate as most of these craftsmen do other work in addition to building or fitting sanitary installations. However, craftsmen clearly see the construction of bathrooms and sanitary units as an increasingly profitable business.

### Relevance of this case for MDG discussions

Infrastructure projects are a perfect stepping stone for developing sanitation markets. Customers are motivated, and they realize that the value of their properties increases. It is crucial that the property rights are granted to new residents, to encourage investments.



Construction of sanitary modules

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- Seco, 2003: Estudio socio-económico del Distrito 7, ciudad de El Alto. La Paz.
- WSP, 2002: Lower Costs with Higher Benefits: Water and Sewerage Services for Low Income Households. Lima.

### Motives for sanitation

41% of people interviewed in a neighbourhood that already has access to sewerage services believe that comfort is the strongest argument in favour of connection. Other motives are: less risk to be faced with complaints of the neighbours, less risk that children (sent to the river to defecate) are lost, cleanliness.

### Making a living with sanitation

After having received start-up support from Sumaj Huasi, mainly in the form of training, Hector Silva from Tupiza (Potosi, Bolivia) started a business specialized in sanitation. Recently, the construction of 52 school latrines brought him a good income, between 10,000 and 15,000 USD. So far, his clients have been mostly from the public sector, including donor funded programmes. To consolidate his business however, Hector Silva is committed to promoting sanitation. He hopes to increase the share of private customers in his business. In taking this course of action, he becomes a change agent promoting sanitation.



## Urban sanitation in Ouagadougou

### ONEA – a parastatal organization

ONEA (Office National de l'Eau et de l'Assainissement) is an autonomous parastatal organisation that was founded in 1985. It is responsible for water, sanitation and drainage in 36 urban centres in Burkina Faso. As part of the decentralisation process, the gradual transfer of sanitation activities to municipal level was envisaged at a very early stage.

Since 1990, WSP has been supporting the Government of Burkina Faso, working with the National Water and Sanitation Office (ONEA) in the elaboration of the “Ouagadougou Strategic Sanitation Plan”. The plan was followed by an impressive upgrading programme, with the installation of more than 28,000 on-site sanitation systems. About 260 artisans/supporting NGOs served thousands of households, and the output of the artisans is rapidly increasing. This sanitation revolution (funds for subsidies) is financed by collecting a 4% sanitation levy on all water bills.

### Background

In 1991, only around 40% of the 700,000 inhabitants of Ouagadougou were connected to the water supply network of the city. Concerning sanitation, about 70% of all households used traditional latrines, while 13% used septic tanks. The modern buildings of the town centre were connected to a conventional sewage system, which transported the sewage to treatment stations. These stations were not functional.

The improvement programme was led by ONEA (Office National de l'Eau et de l'Assainissement). Between 1990 and 1992, a strategic plan was elaborated, basically recommending that the programme should be based on the real demand of the customers. From 1993 until 1994, a small pilot project was elaborated. Scaling up started in 1995 (extension to 30 areas), and at present 25% of the population has access to improved on-site sanitation facilities.

ONEA plans the completion of 78,000 sanitation systems by the year 2010. The programme is being extended to Bobo-Dioulasso and the inclusion of other towns in Burkina Faso is being planned.

### Role of private workshops

The annual output of private workshops (artisans) has risen from 1,000 to 6,000 installations constructed or rehabilitated, demonstrating their progressively increasing role. The fact that quite substantial activities in the sanitation sector were undertaken by private builders prior to the ONEA programme was certainly a positive factor.

The programme trained around 260 artisans in the construction or rehabilitation of sanitary

structures and in the production of sanitary components such as latrine covers, or ventilation pipes. The artisans also started to organize themselves to improve coordination and to have better access to micro credit.

### Creating the market through mobilization

NGOs and other organizations played an important role in preparing the market. Around 60% of customers received multiple visits from various teams before the start of installation/rehabilitation works. In parallel, sections of the public were regularly informed about the programme through TV and radio spots.

Mobilisation expenditures amounted to more than 25% of the total programme costs. It was felt that the success of the programme would be greater if users were well informed about the targets of the programme, the hygiene aspects of the initiative, and the financial implications of various technology options.

Subsidised support was arranged by ONEA, with subsidies ranging from 18% to 30%. These subsidies mainly took the form of building materials (platforms, ventilation pipes etc).



Washing children in the backyard



On-site sanitation module, comprising evacuation of waste water

As with the Bolivian case study of El Alto, improved understanding by users was crucial. 75% of the users with improved on-site sanitation now feel that they have a better image and an improved relationship with their neighbours. 21% say that household work has been made easier.

### Preferences for products

Willingness to pay studies showed that two thirds of future users indicated a preference for a flush latrine. Too little attention was given to the fact that the majority of users still depend on water vendors and use only 20 to 30 litres per day. Consequently, only 1% chose this option when faced with real decisions about their sanitation system.

A demand driven approach was adopted from the outset. Initially however, regulations only authorised the construction of relatively expensive septic tanks and VIPs. A great deal of effort has since been made to include improved traditional latrines at various technical and cost levels along with the construction of showers and waste water disposal systems with soak pits for sullage.

### Benefits for urban development

As long as more expensive solutions were in focus, the middle classes benefited most from sanitation assistance. Poor people preferred cheaper options and showed a strong preference for solutions based on the soak pit. The demand for this option was stimulated by the intrinsic low costs, better promotion and higher subsidies; 96%

of new owners received subsidies ranging as high as 40%. Adapted technical options and additional subsidy schemes should be introduced to assist the poor to further improve their sanitary facilities.

Most municipalities are institutionally very weak. ONEA has started to form strategic partnerships to strengthen them and to improve their capacities in preparation for the future, when they will be expected to play an important role.

### Relevance of this case for the MDG discussions

The preparation of a sanitation strategy, followed by a short pilot phase can form the basis of a city-wide on-site sanitation programme. The fact that funds for subsidies could be collected through a 4% sanitation levy on water bills was crucial.

Studies showed that 80% of the users opted for autonomous sanitation solutions. ONEA accepted that collective sanitation would apply to only about 20% of the caseload, largely located in the city centre and the industrial areas.

Normally, too many ministries and institutions are involved in water and sanitation programmes. A financially autonomous lead agency is needed that is able to generate income for sanitation installations

First experiences have shown that competition between artisans, NGOs and consultants leads to improvements in the quality of the work and to decreasing costs.

### Replication and scaling-up

In the future, the programme should adopt a stronger pro-poor focus. A continuation of subsidies is one option. Another possibility might be to choose technical solutions where users can reduce prices through the provision of labour and building materials themselves.

The potential for scaling-up is good. In Ouagadougou and Bobo Dioulasso, ONEA plans to continue with the subsidy programme until 60% coverage is reached. Medium sized towns in Burkina Faso could also be included in the programme.

### Adapted solutions based on demand and financial possibilities

The programme offers a broad variety of on-site sanitation systems. Options range from more expensive VIP latrines or septic tanks down to budget solutions that include traditional latrine rehabilitation, showers and sullage disposal via soak pits.

### Awareness and knowledge helps: sanitation elevates social status

Developing awareness and perceptions amongst users was crucial: Measures included information meetings, home visits by NGO teams, and guided visits. 75% of users with improved on-site sanitation now feel that they have a better image and improved relationships with their neighbours. 21% say that household work has been made easier.

## Money from Pit Emptying and Faecal Sludge

### Market for mechanical pit emptying

For West Africa, the business volume for mechanical pit emptying in a city of 1 million inhabitants has been estimated at around 1.3 million USD per year.

### Comparing 7 suction truck operators in West Africa

Initial investments range between 8,000 and 95,000 USD, with annual profits ranging between 4,000 and 55,000 USD. Profit is less dependent on the initial investments than on the number of clients that the company serves each year.

**Mechanical pit emptying is a growing market for private enterprise. For decades to come, on-site sanitation will be the most appropriate technology choice for many rapidly expanding areas of the urban South. Moreover, there are many examples (both past and present) of re-using human wastes such as faecal sludges in agriculture or fishery. The overly worn Yorkshire saying “where there’s muck, there’s brass” – where brass is a slang term for money – indicates an acute awareness of the relationship between dirt and money.**

### A growing demand

In many cities of the South, the possibility of connection to a sewerage system is either remote or non-existent, especially in the rapidly growing peri-urban areas. A recently conducted study in West Africa estimated that 75% to 100% of families living in six cities either rely on on-site sanitation (pits) or they have no access to sanitation at all. Getting rid of the pit sludge is the responsibility of the families. To do this, people increasingly depend on the relatively costly services of pit emptying trucks. The cited study from West Africa indicates that an average household pays between 15–30 USD per year to pump out these sludges.

### Private service providers

A growing number of families rely on an increasingly structured private offer for pit emptying services. One of the factors behind this trend is the under-performance of the public

operators. Many of these private service providers are small and medium enterprises. And, according to the cited study, they are apparently overwhelmingly profitable.

In West Africa, the private sector occupies between 40–100% of the market share, depending on the city and the country.

### A delicate cost structure

The cost structure of such an enterprise has recently been analyzed. For example, a typical small company may register around 4–6 journeys per day to a dumping site. The average costs for emptying one truckload (4–6 m<sup>3</sup>) at a dumping site are between 22–32 USD.

Factors influencing pricing include: the location of the house in relation to the dumpsite, the type of pit (e.g. whether faeces are mixed with solid waste), ease of site access, and the financial capacity of the client.



Mechanical pit emptying (West Africa)

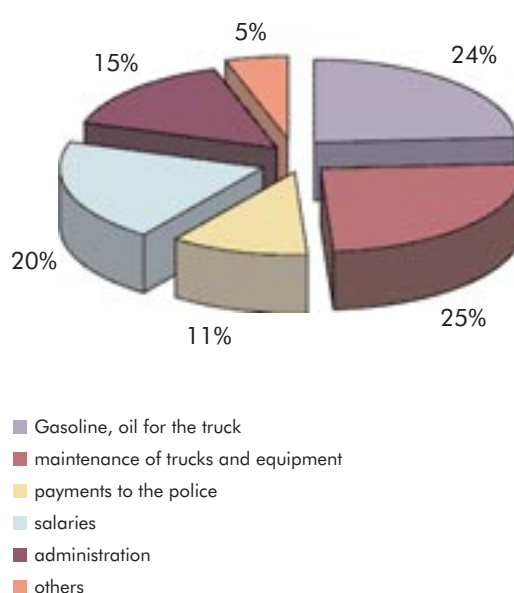


Not surprisingly, a truck breakdown has a severe impact on the profitability of the business. The relocation of a dumping site may have a similarly strong impact.

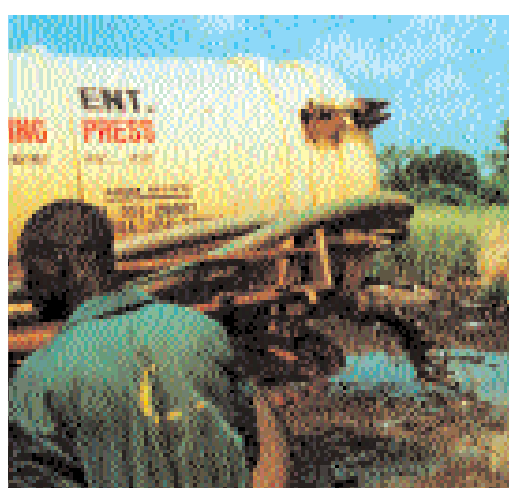
### Dumping, treatment, or re-use?

To compete for business, private operators sometimes fly-dump their loads illegally in undesigned areas around the pit site. This opportunism can lead to severe health risks and pollution of the environment.

Governments are increasingly challenged to identify adequate institutional and economic solutions and/or mechanisms to ensure that faecal sludges are disposed in a meaningful way. Re-use of treated sludges is one of the options.



Cost structure of a small service provider in Bamako (Mali)



Illegal dumping of faecal sludges (Ghana)

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### Challenges for Governments

Public action should focus on the current bottlenecks in the sector. Specific tasks include sector planning; building disposal sites; treating sludge adequately; accessing the poorest neighbourhoods, particularly where road networks are inadequate; licensing of private entrepreneurs; guaranteeing competition between service providers. A good mix of incentives and sanctions will have to be applied to ensure that sludges are delivered to formal treatment or discharge sites.

## New Strategies for Sanitation – It Can Be Done

### The fear of the rich

The fear of cholera was commonplace in many European cities of the 19th century. As soon as the rich and powerful families started to fear for their lives, they paved the way for a sanitation revolution to take place.

### Sanitation strategy and property rights

Property rights have to be incorporated in a demand-oriented sanitation strategy. Failure to resolve this issue can discourage poorer residents from investing in housing improvements.

### Public support to sanitation plans

Poor families know that a connection to water and waste water services is a good investment, because the value of the property is likely to increase substantially.

Correspondingly, resources of the whole family and clan are mobilized to make sanitation happen.

**Objectives should be: rapid increases in latrine coverage, sustainability, and the rapid growth of a sanitation sector that offers employment. Confidence that this state of affairs can be achieved, and consensus that market forces and the private sector are important, encourage national Governments to draft forward-looking sanitation strategies. Implementation of these strategies will occur once customized sanitation plans have been drafted under the leadership of local Governments.**

### Consensus, vision and political will

As demonstrated by the case studies from Asia and Africa, it is possible to meet the sanitation challenge if economic forces can be leveraged with the commitment of Governments. In this sense, building consensus and political will are starting points in the process of achieving results in sanitation and hygiene. This will not be possible without strong leadership, and it is absolutely crucial that strong political leaders – in alliance with economic leaders and strong NGOs – put the topic of sanitation back on the agenda. The fact that the Commission for Sustainable Development (CSD) is giving sanitation and hygiene such important consideration is a big step forward.

### National sanitation strategies

The preparation of a national sanitation strategy, driven by the highest political level, is a good opportunity to reach a consensus. Whenever possible, such plans should be part of the National Poverty Reduction Strategy Programs. Top-level involvement is needed because it is likely that different ministries will have to be involved in the process. Examples might include the ministries responsible for housing, rural development, health, water resources, and finance. But developing top-level strategies does not mean developing top-down master plans: civil society should strongly endorse these plans. Popular artists, sports heroes, top models and other well-known persons should be recruited to back such strategies from the beginning.

Once embarked on the “business paradigm”, Government will distance itself from the role of direct service provision and will instead become a facilitator and conductor in the overall process. The private sector, NGOs and civil society must be recognized as fully-fledged partners in a much broader response to needs.

### Out of the shadows: the end of hypocrisy

It should not just be silently accepted that 2 million people are dying of diarrhoea every year. This situation must be publicly “outed”, just as the HIV/AIDS situation has been brought into the open after having been taboo for far too long. There are considerable similarities between sanitation/hygiene and HIV/AIDS – both topics are closely connected with intimate behaviours and attitudes and poverty, both topics are overshadowed by taboos. This brochure shows that sanitation and hygiene can be viable long-term business proposition. Over 1 billion poor customers are currently waiting for innovative and affordable products and services. This is a huge market, if it can be tapped properly.

### A new brand for sanitation and hygiene

Even in poor areas, sanitation can be successfully branded as “providing comfort”, “improving prestige”, “adding value to real estate”. The case studies show that astute branding is a major success factor underpinning the “business paradigm”.

This process can be effectively supported by “gentle coercion”, under the leadership of Governments and civil society. Sanitation and hygiene can easily be integrated into large-scale good governance programs, especially their decentralisation components. Examples of coercion include: the definition of standards for new houses, the enforcement of building regulations, the promotion of programmes that integrate drinking water and sanitation into one package (e.g. combined tariff).

### Local sanitation plans

The elaboration of local level sanitation plans is a suitable vehicle for implementing a national sanitation strategy. The need for capacity building (e.g. in the private sector) may more easily be approached from a practical perspective.

## Fresh partnerships for sanitation

**To meet the challenge of sanitation and hygiene calls for a multi-stakeholder approach with concerted efforts, requiring an active involvement of Government, civil society and the private sector. Leadership of the national Government will be important to bring multinational companies on board whereas local Governments play a role in coordinating with the small and medium enterprises, civil society, and NGOs. This is a new challenge for many institutions which still have to learn the art of multi-stakeholder co-operation.**

### National partnerships

National level partnerships can be formal (e.g. task forces, consultative groups, national committees for sanitation) or informal. Either way, national Government will take the lead as facilitator.

At national level, the private sector partners are likely to be larger companies, interested in pairing-up with Government for the sanitation and hygiene campaign. Small and medium enterprises should be involved whenever possible.

As seen in the Bangladesh case study, NGOs, international agencies, and the media can play an important role in organising and mobilising communities. They are important players in national plans for sanitation and hygiene.

In complex transitions where national public sanitation bodies or programmes have to be dissolved, it is important to include labour unions as partners.

### Local partnerships

Local platforms play an important role in transforming national sanitation strategies from abstract notions into tangible action.

Local governments must play a key role in organizing such decentralised partnerships for sanitation. Frequently however, local governments and municipalities are institutionally weak. Whenever dealing with local institutions, the need for training and other capacity building support must be evaluated, and appropriate measures should be bundled with strategy implementation.

### How to involve the private sector

Private sector know-how (about the market, pricing issues or the establishment of supply chains) is central to meeting the challenges facing the sanitation and hygiene sub-sector. The private sector will only participate actively if it sees an incentive to do business.

Public-private partnerships expose a number of challenges for the public sector, which call for the formulation of rules. Key issues include:

1. How to deal with the problem of competition between companies that show an interest to participate, and how to ensure that the partnership for sanitation does not distort the market.
2. Public collaboration with large private companies carries the risk of churning out lip service instead of generating true commitment. Codes of conduct are needed that spell out the rights and duties of every partner in a PPP. NGOs can act as regulators or “watchdogs”, but they can also spoil a partnership with unfair allegations.
3. Much has still to be learned. Experience with PPP in handwashing represents current best practice and provides valuable material for shaping future alliances as they continue to evolve all over the World.

### Multinationals and large companies are potential partners

Examples include: soap industry, cement industry, water and wastewater service companies. Other potential partners include food and restaurant chains, or NGOs that recover the costs of their services as a matter of principle.



Biogas production in community latrines (India)

Source:

– Camille Saadé et al., 2001: “The story of a Successful Public-Private Partnership in Central America – Handwashing for Diarrheal Disease Prevention, Washington. (see: [www.globalhandwashing.org](http://www.globalhandwashing.org))



## Intelligent and Effective Subsidies

**The MDGs in water, sanitation and hygiene can be only achieved by involving the private sector in the overall strategy, but market forces will not spontaneously guarantee the interest and participation of private enterprise. Subsidies, either from Governments, from donors, or from NGOs (or cross-subsidies levied on water), play a crucial role in meeting the sanitation challenge. But subsidies should be applied with great care and in a sustainable way. Public support for market creation or supply chain development is a lot more effective than subsidising the basic transactions.**

### Desires and dreams as driving forces for sanitation and hygiene

As shown in the case studies, better sanitation and hygiene can be built around common desires for a better life in general. This is the spark that intelligently subsidised programmes must harness, in order to develop the potential for sanitation and hygiene markets up to the point where critical mass is attained – and markets become permanently established.

Increasing the motivation of people who lack access to sanitation is always effective, using measures such as social mobilisation. Methodologically, social mobilisation works through advocacy with champions and leaders, publicity, the building of alliances with partner organisations and, where needed, household visits. The social dimensions of sanitation and hygiene should not be underestimated – the case of Ouagadougou shows this clearly. Here, 75% of the project participants felt that they acquired a better image and an improved relationship with their neighbours after completion of on-site sanitation systems.

Collaboration with larger private companies (e.g. soap industry) on communication campaigns is effective where public and private sector partners share common interests, particularly for larger campaigns.

### Enforcement of sanitary practices

Social mobilisation takes more than just motivation and encouragement (the “carrot”). Campaigns also need “gentle coercion” (the “stick”), pressuring people to change sanitation practices and behaviour patterns. Social pressure is important.

The development of Government capacity, at national or at local administration levels (e.g. to enforce building or sanitary regulations) requires public funding. Through such capacity building modules, sanitation initiatives become vehicles to reinforce political and fiscal decentralisation.

### Pricing, affordability and cross-subsidies

The cost of products and services is absolutely crucial and their affordability must be in the centre of any strategy. “The rural poor have only ever encountered two types of latrine”, says Chandan Sengupta from UNICEF New Delhi. “The first are septic-tank latrines that they know exist in the homes of the rich villagers – latrines that cost ten or fifteen times more than a poor man’s entire house. This has created the impression that a latrine is a luxury that will always be far beyond reach. The only other latrines that villagers know are the filthy, smelly, badly



Demonstration latrines for social mobilization in Bangladesh



Hygiene is more than just sanitation hardware

maintained ones they have seen in railway stations or public institutions. And they don't want those anywhere near their homes!"

Affordability can only be managed through less expensive designs, not through subsidies. Due to the sheer numbers involved, the idea that septic tank latrines could be subsidised to an affordable level for the poorest sections of society is a non-starter. The only alternative is a less expensive product that is made for the poor, but which is not a poor product. Design innovations and correspondingly flexible policies are essential if the daily lives of the poor are to be influenced by any sanitation and hygiene initiatives.

### Supply chain development

Subsidies can be crafted so that they establish and strengthen supply chains. Providing financial support for training masons, shopkeepers and traders can be an effective way of using subsidies to develop the sanitation sector. The RSM (Rural Sanitation Marts) are a good way of making supply chains more viable. If they can be supplemented with public-private partnerships

involving the cement, ceramics and tile industries, they can become even stronger in the future.

### Other programmes as entry points

Various case studies demonstrate how infrastructure programmes can act as entry points for launching a sanitation campaign in partnership with the private sector. Subsidising and coordinating such campaigns can add significant leverage to public spending.

### Investments are needed and should be attracted

We must not forget that reaching the MDGs in sanitation will consume very large quantities of money. However, expenditure in water, sanitation and hygiene is a highly beneficial form of investment. Placing clean latrines in schools will educate children, instilling the next generation of adults with the desire for clean latrines in their own homes. Encouraging children to wash hands will also pay dividends in the future, as will all kinds of hygiene education, social mobilisation and physical investments in better housing and in infrastructure.

At the macro-economic level, these investments will save on costly and largely unproductive (curative) medical treatments. They will also boost productive capacity and stimulate economic growth. A society where the majority is sick with diarrhoea and allocating significant amounts of disposable household income on curative medicine is losing ground in an increasingly competitive world.

### Social mobilization responds to the call for greater donor efficiency

The State implemented latrine production programme of Bangladesh, which ran until the mid-1990s, cost more than double the social mobilization campaign for sanitation. Yet it was the latter that brought about a doubling of the rural sanitation coverage.

### Sources of Pictures (with ©)

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