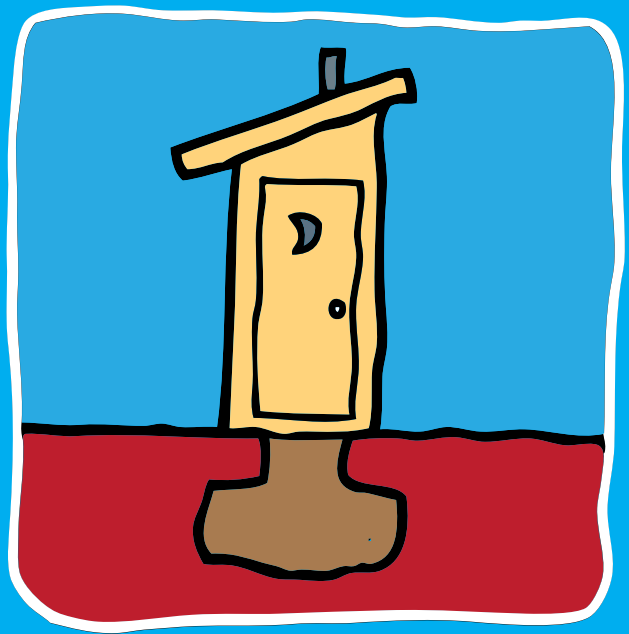


# Soap stories and toilet tales

10 Case  
Studies





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*Commentaries represent the personal views of the authors and do not necessarily reflect positions of the United Nations Children's Fund.*

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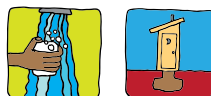
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# INTRODUCTION

The importance of the safe disposal of human excreta and handwashing with soap as critical public health interventions for rural and urban communities is undisputed. We know that community-wide, consistent use of latrines, combined with adequate handwashing can drastically reduce the disease burden among children and their families. What is important is the course of behavioural and social change in communities, schools and individuals that takes place resulting from these interventions, and the more far reaching development outcomes of these processes.

This collection of case studies highlights that existing norms, habits and attitudes can be transformed when the motivation for adopting appropriate sanitary or hygienic behavior is understood. In this process, social development outcomes emerge as central drivers for change. Privacy, dignity, affiliation and pride are important catalysts that function both as a means and an end in improving hygiene and sanitation behaviours.

The central role children play in creating hygienic schools is highlighted in the stories from Egypt, India, Senegal and Nepal. Provision of appropriate facilities such as separate toilet blocks for girls in schools leads to higher attendance rates, especially once girls have begun menstruation and require privacy. The Bangladesh tale demonstrates how interpersonal communication can change strong taboos around menstrual hygiene, whereby girls are allowed to hygienically manage their menstruation without being stigmatized.

The Bolivia, Nicaragua, Zambia, Cambodia and Sierra Leone case studies describe how collective processes of change in communities have resulted in Total Sanitation. By focusing on eliminating open-defecation, the conditions of a whole community can be transformed. Keeping a clean and healthy community can help build and maintain community morale.

UNICEF is proud to highlight the various courses schools and communities have taken to improve their lives, and how sanitation and hygiene can be an effective entry point for broader social development. This package has been developed with input from the respective UNICEF country offices, with support from Maggie Black. The stories are intended to provide a closer look at the human side of the daunting sanitation and hygiene statistics. With the many challenges, there are also many victories which this series attempts to capture.

# Egypt

## Empowered for good: Children in Upper Egypt change environment and sanitation habits

Perhaps owing to her innate elegance, her peers refer to 10-year-old Fatima, from Tawayel El-Sharqiyya as a future leader. Her words are strong, as are her positions on the urgent need to protect the environment. At her young age, she has started to write poetry, and though her themes are varied, among her commitments is to improve environmental awareness in her school and amongst the village community. 'I have learned a lot about how to keep the environment safe at school. Now, whenever I meet a child who doesn't take care of the environment, I feel sorry for him, and I try and tell him ways to change his habits.'

Like the primary school children of 373 primary schools in Assiut, Sohag and Qena governorates, Fatima has directly benefited from UNICEF's School Sanitation and Hygiene Education (SSHE) project, which was launched last year. And because of the close-knit nature of the communities in Upper Egyptian villages and towns, the impact of the project has been manifold, and profound.

That the programme has taken a holistic, participatory approach goes a long way in explaining the reasons behind its success. Over 1,400 schoolteachers received training on how to effectively deliver messages relating to the environment, sanitation and hygiene to pupils, both within the context of the subjects they teach

and beyond. Those who received training then went on to involve other members of school staff by informing them on how to implement these important messages.



Fatima, from Tawayel El Sharqiyya in Sohag

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For some children much of the information relating to environmental awareness was no doubt new. But in many cases, given the rural nature of Upper Egypt, the programme had the advantage of enforcing a pre-existing respect for nature. 'Now, when I see people throwing things away on the streets, I tell them not to do that,' said 13-year-old Islam, who goes to school in Zarazra Elementary School, Sohag.

*'If we are clean then we face a lower risk of disease,' said Islam. 'I believe fully in what we are doing for ourselves, and for the environment. I can see the whole town has benefited, and we must continue with our work.'*

With confidence in his knowledge enforced, his self-respect has also risen. 'Being so involved in the project on environmental awareness, I have also become more focused on my studies. I think this is because when you are good at one thing, you want to try your best in other things too.'



*School children wash their hands before lunch time, in Zarazra school*

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Through the use of art and outdoor activities including tree-planting on the school grounds and in the villages, children directly participated in their own education and also in the broader context of public community life. 'We planted trees outside, and this made us feel very good,' Islam said proudly.

Simultaneously, UNICEF provided the technical and financial support to rehabilitate both bathroom and sink facilities in the target public schools, and thereby made it possible for children to have access to the facilities that



*More trees were planted in the school grounds in Zarazra.*

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would help them practice better hygiene. 'So we taught the kids a number of different things, such as the need to wash their hands after going to the bathroom,' said teacher Safaa Sadeq at Zarazra Elementary. 'Then they started to implement those basic messages at home too, and we knew then the change was for good.' Growing up in Upper Egypt, the children of the target regions may well be amongst the country's poorest and thereby in many ways most marginal. However, that the children of Upper Egypt have become capable of taking the lead on sanitation and environmental issues has empowered them for life, with the Ministry of Education taking the lead at the grassroots level to help improve conditions for the school children and communities.

'The Egyptian Government's commitment has been crucial for the success that has been achieved so far' said Dr. Vijayakumar Moses, Chief of Young Child Survival and Development Section at UNICEF Egypt. 'We believe that what these children have learnt from being involved in this project will contribute to their development and help them live healthier and more productive lives.'



# India

## SWASTHH: India's 'clean school and village' movement

'You must meet Parvati Kumari, our Minister of Health,' says William Baa. 'She is so popular that she has been re-elected for three years in a row.' The Minister is duly summoned, along with the Prime Minister, and other Ministers for Finance, Environment, Culture and Sports. All are neatly uniformed in blue, with hair combed immaculately (boys) or braided (girls), and tidy shoes. None is over the age of 17.

This is the Child Cabinet for the Middle School in Kakaria, a remote village in Ranchi district in the Indian state of Jharkhand. Not many visitors venture into this jungly area because there is local unrest. But educational change has nonetheless reached here, in the form of a programme known as SWASTHH (School Water and Sanitation Towards Health and Hygiene). 'Swasthh' means 'health' in Hindi, and this programme is all about improving the 'health' of basic schooling. In Ranchi district alone, over 1,800 schools have benefited during the last three years.

Swasthh is one of several government initiatives aimed at changing the culture of schooling in rural India as part of the drive for 'education for all'. This is a huge undertaking: hundreds of thousands of village schools are drab, badly-constructed and under-equipped. Toilets, if they have them, are typically crude and without a separate block for girls. Attendance is poor, classes large, much learning is by rote, and teachers and students often lack motivation. Parents may see



Parvati and the Child Cabinet in Kakaria  
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little point in insisting their children attend, rather than do useful work at home. All these factors contribute to drop-out, especially among girls. If the school is not a place to which parents can safely entrust their daughters, they don't send them. Besides, no-one learns — or teaches — well in a down-at-heel environment.

### Training and transformation

Teachers' training and curriculum reform are also in hand, but they go side by side with physical improvement. The transformation of the school environment under Swasthh, including décor inside and outside the classroom, better sanitation facilities, planting of flower



and vegetable gardens, emphasis on cleanliness, closer links with parents and community members, and better turn-out of students, help generate high morale. Child Cabinets are helping to make that happen, and as far as hygiene is concerned, the key person is the Minister of Health.

Every day, Parvati arrives at Kakaria school early, and checks the condition of the compound. She has a roster of helpers, and she puts them to work, cleaning and sweeping. 'Everyone in the school has to play their part', she says. And this includes regular washing and scrubbing of the toilets. These are extremely basic — in fact there are only two, so they are allocated for girls' use only. Parvati ensures that, throughout the day, they are kept clean and pleasant. 'If there is a problem and a new girl does not know proper toilet usage, I ask a member of staff to explain.' Similarly, children who come to school unwashed, without shoes, with dirty finger-nails or hair in a mess, will be gently taken in hand. Parents are told through the Village Education



Parvati demonstrates how to wash hands

©UNICEF India/2008/Black

Committee that personal hygiene for students is a must. Every student contributes to the funds collected by the Minister of Finance. They pay for replenishments of soap, brushes and cleanser.

### A definite change

William Baa, head teacher at Kakaria, says that since Swasthh arrived in 2005, he has seen a definite change in health and hygiene, and a greater interest in education in the community generally. The Child Cabinet is part of that: to be elected brings status to the child and the family. 'Every year we hold an assembly for all 680 students. The students and teachers give their views about candidates for different jobs.' Those selected are given training, and there are also sessions with teachers, Education Committee members, and the school at large. When Ministers do well in their jobs, they are awarded prizes.

This school is one of 2,830 schools in Jharkhand to be reached by Swasthh, and every school is different — in size, facilities, student make-up, and local familiarity with toilets and hygiene. Experience shows that repeated rounds of training and familiarization with new concepts work. Because Kakaria is remote, some aspects are not as strong as they might be. There is as yet no toilet for boys; even Parvati cannot recite with confidence the causes of diarrhoea; and a solid fence to secure the compound has not yet been built. The Minister for Gardening is unable to grow vegetables in the face of marauding goats.



The Ministry of Gardening maintains the garden

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*The Swasthh Décor at the Reshan School*  
©UNICEF India/2008/Black

At Reshan, a much less remote village elsewhere in the district, the school has been taken into its heart by the community since Swasthh arrived — everything that happens there is a source of local pride. The compound is fenced with criss-crossed barbed wire, the gardening ministry tends neat flower and vegetable beds, and mothers incorporate the produce into daily school meals. The Swasthh décor team have painted hygiene messages all over the walls in bright yellow, and the Minister of Water dispenses water from the special water vessel, which no fingers or hands are allowed to touch.

Ashok Beri, president of the Village Education Committee, says: ‘Up to 2005, diarrhoea was a rampant problem here. After Swasthh, radical changes have come. Children started trimming their nails and washing their hands with soap, and insisting that their parents do so as well. Garbage used to be thrown outside the house. Now people dig pits and bury it. Children tell their mothers to wash their hands before cooking and eating, and their mothers do what they say. In two years, we have really seen a difference. Diseases have dropped considerably and the village is clean.’

No Child Cabinet is complete without a Minister of Culture. In Kakaria, children joyfully take

part in music, songs and dancing. In Reshan, the focus is on dramas. This is how the Cabinet helped spread messages to the community, according to Ashok Beri. ‘The teachers taught the children plays, and when the old people were relaxing in the village square in the evening, the children would come and perform their dramas. Then everyone discussed the issues.’ The Child Cabinet in Reshan has also organized rallies, taking the sanitation message around the community from door to door.

### Construction is easy, but behavioural change is not

Swasthh grew out of a programme, also backed by UNICEF, that began nearly a decade ago to construct water and toilet blocks in schools. But it quickly became clear that installing facilities — essential though it is that boys and girls

### Sanitation and Puberty

Parvati Kumari, Kakaria’s Minister of Health, particularly impressed Headmaster William Baa by her prompt action when a girl was taken ill. ‘She informed a member of staff, and then she accompanied the patient to the health centre. This was reassuring for the parents, and we were all most impressed.’ Inquiry reveals that the girl had fainted in class and caused great alarm. This is not an easy subject to broach, but it seems likely that this was the onset of menstruation and the girl was bleeding profusely. Parents frequently withdraw their girls at puberty, but if they can see that they are taken care of and their needs respected, they are much more likely to let them continue to attend. The story will have been passed around, and other parents reassured too.

have their own places to ‘go’ — was not the critical aspect. Construction is easy, but behavioural change is not. One issue was maintenance: who was going to look after the sanitation blocks and keep them clean? Another was knowledge: children and parents knew far too little about health and hygiene. Out of this came the focus on school governance, to combine understanding with a change in parent-teacher-student respect for the whole school environment.

Sukanya Subramanian, UNICEF Education Project Officer for Jharkhand, emphasizes that such a transformation, especially one that the whole community buys into, takes time. For example, when Child Cabinets were first introduced, some teachers did not take the lead in the way expected. ‘We found some Cabinets were being used as an unpaid work force for school cleaning and other tasks. So we had to introduce much more training and orientation — for everyone.’ Another problem was to persuade Education Department staff at local, district, and state level to own the project instead of leaving it to sanitary engineers. ‘Swasthh is about changing attitudes — not building things. That is an educational aim’, says Sukanya. ‘It is hard to convince education and engineering staff to see things differently and join forces, but we have made huge progress.’

Since 2005, Swasthh has been known as ‘Swasthh Plus’ — the ‘Plus’ meaning ‘Putting lessons to Use’. Schools in Jharkhand and Karnataka nowadays receive funds for toilet block construction and barbed wire fences from the sanitary engineering budget, while education- alists have used Swasthh to focus on health and hygiene messages and school governance. From 2008, lessons learned over 10 years in how to pull the different strands together are to be incorporated into the nation-wide push for ‘education for all’, targeted to growing numbers of India’s millions of schools. Through the drive for ‘a clean school and village’, everyone has a stake in a brighter future. ■



[The Reshan Minister of Water](#)

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# Senegal

## 'Building for life'—in the midst of civil insurgency

In the far western bulge of the African continent, in a landscape once 'discovered' by Portuguese explorers and still dominated by baobab trees, mangrove swamps, sea-going pirogues and huge rivers disgoring into the Atlantic Ocean, is a very special school sanitation programme. In Casamance, southern Senegal, a long-running civil insurgency has disrupted regular life and inhibited development in every area. But an extraordinary effort, based in Ziguinchor, the regional headquarters, has been made to keep the schools running and even enable them to improve.

Due to local poverty and the ongoing emergency, the World Food Programme (WFP) provides food rations for schools in the most deprived areas. UNICEF has added a programme in the same schools called 'Building for Life'. Its core feature is the construction of toilet blocks and water points to reduce diarrhoeal sickness and parasitic worm infestation among the children, and generally demonstrate the virtues of safe and tidy toilet practice. The water supply also makes it easier for a roster of mothers to prepare the daily meal and to wash up afterwards. But — as with all well-conceived school sanitation interventions — the package is designed to bring about many other benefits.

One need is to encourage the enrolment and retention of girls in school. In Senegal as a whole, 500,000 school-age children do not attend school, and 300,000 of these are girls. The lack of separate toilets for girls — or any toilets at all for children to use during the school day — is a major disincentive to girls' attendance. Parents feel their daughters are disgraced and potentially subject to harassment if they



The school girls wash their hands with soap after having used their new toilet blocks

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have to go in the nearby 'bush'. In this region of insecurity, there is also a need to revitalize the schools and enhance their role in building a peaceful and productive community. With strong parent-teacher associations and solid links between staff, students and the surrounding population, the school can become an oasis at times of rebel disruption.

Under 'Building for Life', students are taught skills that include stress management and conflict prevention, environmental knowledge, and health and hygiene information. The water supply also constitutes an emergency stand-by for the community in times of drought. The toilet blocks are open for use out of school hours by members of households who have not yet installed their own at home — so long as they leave the cubicles clean. Despite the emergency, a majority of the 435 targeted schools have by now been reached, embracing well over

100,000 children altogether — and through them, their families.

### A clever self-cleansing design

The design of the toilet blocks in Casamance is special. A local NGO, Idée Casamance, which provides entrepreneurial skills to young men leaving school, is responsible for their development. In spite of the heavy rains that fall in the wet season, the blocks are without roofs. Idée's models are based on the VIP, whose fly-reduction system depends on cabin darkness. But in the dark, it was found that boys aimed poorly. The walls were not tiled, and as urine is very aggressive, they soon began to smell horribly.

First windows and light were introduced. Then it was realized that, if the blocks were built without roofs, during the wet season when the schools are closed, all the cubicles and pans would be thoroughly washed by the rains. The buildings also manage without doors since the student entering the block turns right or left to enter one of the cubicles. Girls who might otherwise be shy to enter feel their modesty is protected. And problems with broken doors and hinges are avoided. Outside, there are wash basins with taps and soap. The whole construction is neat and compact.

### At the hub of village life

At Dar Salaam Pakau, the school is in a grove of vast baobab trees at the heart of the village. Although the school director, Abjant Ndiaye, does not like the way the road leads straight through its grounds, this does mean that the school is at the hub of village life. Ndiaye says that, as a result of 'Building for Life', the school is run on a much more participatory basis. There is now a school assembly with deputies from each class and 'commissions' for health, hygiene and sanitation. A woman from the village looks after the water pump, and others have been developing the vegetable garden. There is also a commission to manage conflicts in the village. 'Since the school government was installed, there has been a much better sense of civic responsibility in the community and the atmosphere is much improved,' says Ndiaye. 'Once we came back from the week-end and found the toilet dirty, so we had a meeting in the village to change this.'

Although the primary targets are the children, Ndiaye believes that they transfer information effectively to their elders too. 'We organize the children to spread

ideas in a democratic way. They wear special caps to give them self-respect. This has also changed their relations with their teachers, who are now willing to share some of their power.' The mothers in the village have been prompted to start their own association. As well as supervising the school feeding programme, they monitor the way the children clean the school, and if the toilets are not as they should be, the commission for hygiene is summoned. When there is a festival, the school toilets are thrown open to all. The sense of high community morale, centred on the school, is palpable and convincing.

### Persuade the children and adults will follow

The local district engineer, Augustin Kelly, pays tribute to the involvement of UNICEF in the programme. 'Before UNICEF came, there had been school closures. But they proposed that we work with teachers to make education more secure. They produced special packages and training models to show teachers how to put across hygiene and other types of messages in the classroom. The result has been a real change in people's habits. It is not so difficult to persuade a child to do thing differently as it is to persuade an adult, but if you change the way a child does things, then the adult follows.'

Augustin Kelly also sees a reduction in disease. 'In the past, we had diarrhoeal diseases, in the north we even had cholera. Now diarrhoea has reduced. Livelihoods have also improved: if the child is in good health, the family gains. There is a reduction in parasites, and the number of hospitalizations of children is lower than elsewhere. Also the exam results are better.' Demand for household sanitation has also risen. 'Those around the school want to have toilets nowadays, and this provides employment. Sanitation is an idea whose time here has come.'



Privacy and dignity: the girls have their own toilet block

©UNICEF Senegal/2008/Bakker

# Bolivia

## *A new-fangled device arrives in the Bolivian Altiplano: the toilet*

High up in the Bolivian Altiplano, nearly 4000 metres above sea level, a novelty has arrived in the village of Catavicollo: a toilet. 'We didn't have a single toilet in my community before,' says 13-year-old Nancy Nina Parina. 'We used to go up into the hills behind the school. We girls had to go further up to make sure the boys couldn't see us and laugh at us.'

Recently, two toilets — one for boys and one for girls — were installed in Nancy's school as part of a UNICEF sanitation programme extending to 38 municipalities in five of the country's departments. The school at Catavicollo is one of 219 to have benefited from these water and sanitation projects during 2007. Altogether, this multi-donor programme spent over US\$4 million last year, including US\$374,000 donated by Sweden especially for school toilet facilities.

Each local project, of which there were over 450 in 2007, is designed to fit with the local ecology — including the types of toilets, water systems, and washing and bathing facilities. Usually, the concept of a toilet along with piped water supplies, hygiene and handwashing, is introduced to families and schools at the same time. But schools often lead the way: young people more easily adopt new behaviours than their elders.

Life is hard on the Altiplano, and many people migrate elsewhere in search of better jobs and

living conditions. Most communities are small, and lie scattered and exposed to harsh cold weather in the semi-desert environment. Catavicollo contains 22 families, including Nancy's, with 78 people altogether. They make only a bare subsistence living, raising llamas and alpacas and selling their wool as their main source of income. Food crops — mainly potatoes — are



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only grown for their own consumption since agriculture of any kind is difficult and risky: frost can devastate all the crops in one cold night.

### A very dry area

The need to conserve water has encouraged the promotion of ‘ecological sanitation’. Nancy explains: ‘The people who installed our toilets’ — an NGO called SEMDE, working in conjunction with the municipality of Challapata, the local authority under which Catavicollo falls — ‘demonstrated that these toilets don’t need water. After we have used them, we just spread some ash on top.’ This helps keep smells at bay, acts



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as a drying agent, and aids the biodegrading process. The students don’t use toilet paper — something unknown to them and far too expensive. ‘Sometimes we use other paper, or even rocks, for wiping.’

Germán Cardozo, the school Principal in Catavicollo, is convinced that eco-toilets were the best sanitation option in this setting. ‘The flow of water to the community is enough for cooking and drinking, but it would not have been enough to supply flushing toilets,’ he says. ‘This is a very dry area and in some months the water level drops off noticeably.’ Water is needed for handwashing after toilet use, and students are encouraged to use the new tap — but accord-

ing to Nancy some are lazy about this part of the new sanitation and hygiene regime.

Each toilet has two pits. The number of students at the school is not high, so one pit may last for a year or even two. When full, the first pit will be sealed and the contents left to biodegrade, while the second pit is used. When that is full, the first one can be emptied and the — by now entirely inoffensive — material removed and buried.

In principle, it would be useful if the local community were able to accept the use of this biodegraded material as fertilizing compost, but as in many parts of the world, that is a difficult idea to put across in settings where people go out of their way to avoid having anything to do with faeces. And they have a point: the biodegraded material is not completely innocuous, so handling and burying needs to be done under strict guidelines. In communities in other municipalities where this idea has been introduced, most people have yet to be persuaded that this material can be used to grow crops. In the first instance, the important switch is from use of the great outdoors for the ‘daily business’, to use of a toilet. That alone is a behavioural upheaval.

### Education and awareness

The introduction of sanitation in remote communities such as Catavicollo, where people are not used to change and have used the ‘open air’ for waste disposal for centuries, is not achieved by the simple act of building facilities. The most important aspect of any sanitation intervention, in Bolivia or anywhere else, is to make people aware of the dangers of leaving faecal matter lying about and of the values of sanitation and hygiene in promoting healthy living, dignity and cleanliness. It is also important that ‘new users’ fully understand how to use the toilet properly, and that they introduce systems of keeping the toilet clean and providing for its maintenance. Also that they realise that fingers can be a means of passing on disease, and take the trouble to wash their hands.

A recent anthropological study found that, while 70 per cent of new users in the UNICEF-assisted programme were using the new household toilets for their intended purposes (30 per cent



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were using them for something else, storage of grain for example,) only 21 per cent were using the ecological toilets exactly as they should be used: for example, putting faeces and urine properly in their separate ‘containers’, keeping the sanitary platforms faeces-free, and regularly ‘flushing’ with ash. Like any toilet that is incorrectly used, an eco-toilet can quickly become unpleasant.

Often the first ‘sanitary aid’ the programme introduces is clean drinking water, piped from springs or underground aquifers to public standpipes in the villages. Even if communities may be skeptical about the benefits of sanitation, they always appreciate a reliable water supply close by their homes. This saves the women and girls hours of heavy work a day carrying water containers. In Catavicollo, a 12-tap public water system was built in 2005. At the same time a Potable Water and Sanitation Committee (CAPYS) was established in the community so that they would manage, operate and maintain this and future facilities. The following year the toilet arrived in the school, and their responsibilities were accordingly extended.

However, many local CAPYS committees are not very dynamic and do not manage to spread enthusiasm for toilets among local householders. So far, in Catavicollo, according to Nancy, no-one has adopted a toilet at home. ‘Our houses still don’t have bathrooms. Sometimes we come over to the school to use the toilets, but if I’m out in the field somewhere — well,

I just look for someplace ...’. Old habits die hard, but the school is setting an example. ‘Our teacher told us that we have to use the toilets and about how important it is for us to wash our hands afterwards. We now know that using the ecological toilets keeps us healthy and keeps our community clean.’ Other sanitation lessons have been incorporated into the curriculum: for example, that water should be boiled before drinking.

But can the students be expected to persuade their parents to take up these new behaviours? The difficulties of extending the effective and regular use of toilets, together with better personal hygiene practices, from the school into the community has recently been exercising the programme designers in UNICEF and the government. It was for this reason that they conducted studies to develop an insight into how local people in different environments see this awkward subject, i.e. why they do or don’t adopt new behaviours, and then to feed the findings into new communications and awareness strategies.

### Strengthening local capacity and skills

One approach has been to try out a mobilization methodology originally developed for promoting ‘total sanitation’ in communities in Bangladesh, and now being adopted for use in countries all over the world, including Bolivia. This involves calling a village meeting, and bringing people face to face with the perils and disgust of leaving their detritus around — even walking around the ‘defecation’ sites they normally use. With the realization of the disease risks to which they are exposing themselves and their children, and profound disgust at the thought that minute particles of other people’s excrement are ending up in their mouths and digestive tracts, people are inspired to adopt toilets and make their community ‘open defecation free’. This methodology is now being adapted and will in time, as facilitators are trained, be replicated throughout the country. Hopefully this will help increase demand for family and school toilets.



In order to spread the sanitation programme, make it more effective, and ensure that it really enters people's consciousness in a permanent way, UNICEF has devoted considerable resources to training staff and promoters at all levels. There are special college courses for staff in senior government jobs, and workshops for those in municipalities and communities. Both aspects — ensuring high technical quality of construction, and promoting hygiene and community awareness — need to be tackled for programmes to work; and different skills are needed. Up to now, performance on the technical side has run ahead of social transformation. During 2008, a new nine-month course is being launched by agreement with Nur University, to develop a cadre of 150 'community development technicians' with skills in both areas. Once they use their new skills on the ground, take-up of sanitation and hygiene is bound to improve.

All this effort is designed to enable communities to adopt toilets with understanding and interest, contribute to their construction and learn how to use them properly. The programme has found that there has up to now been some confusion in people's minds between what appear to be conflicting ideas: 'confine faeces and don't have any contact with them for health reasons'; and 'use composted faeces for growing food'. This confusion of messages, the failure to use the toilets properly, and the lack of solid health impacts has led to a revision of sanitation strategy.


From now on, eco-toilets will only be constructed in schools. For household sanitation, community mobilization against 'open defecation' will be adopted instead, both to generate community disgust about their existing practices, and to empower them to build their own toilets. There is now a wider and cheaper range of family toilets to recommend to communities who commit to 'total sanitation'.

### Building for the future

The success of the programme in schools should not be underestimated. In the past year, over 3,500 students gained from the provision

of safe water, ecological toilets, and hand-washing facilities, and many teachers are now advocates for cleaner and sanitary living. Once a girl such as Nancy Nina Parina has learned at school the value of toilets and their connection with good health, her behaviour will be changed for life. This means that not only she, but her own future family, will have better chances of survival and good health.

And the experience she and her peers have gained can be truly enjoyable. Just recently, another innovation came to Catavicollo school: a hot shower. Black hoses lying in a spiral shape on the bathroom roofs absorb the sunlight pouring down, heating up the water inside them. 'To use the eco-shower we take turns according to our classes. I'm in seventh grade, so I get to use it one Thursday per month,' says Nancy. 'It's really nice having a hot shower. I used to go to the river with my mum, but the water there is really cold. And because it is so public, it is impossible to wash your whole body at the same time.'

With a full complement of home improvements arriving in the Altiplano — piped water, toilets, handwashing basins and showers — family sanitation may well be on the brink of take-off in Catavicollo and the whole Challapata municipality. This expectation is enhanced by the way the Bolivian Vice-Ministry for Basic Services has recently taken up water and sanitation as an important means of improving conditions in neglected rural communities. A 'basic sanitation' strategy has been devised and is being communicated to all municipal governments during the 2008 International Year of Sanitation. These developments indicate a change of consciousness at the higher levels of government: a true example of what UNICEF advocacy and partnership can help bring about. 

# Cambodia

## A Cambodian village decides to bring sanitation closer to home

Villagers in Slaeng, 60 kilometres southwest of Phnom Penh, have made a commitment almost unique in rural Cambodia. They have determined to abandon 'open defecation' — the standard system of sanitation since time immemorial. In the past three years, every single household has built a toilet, and the 452 inhabitants have resolved to perform their bodily functions in their new toilets. This change of behaviour is revolutionary, considering that until recently — according to Mr. Chan Ngorn, the village chief — people thought it deeply distasteful, even frightening, to squat over the dark pit of a household latrine.

Traditional reserve about sanitary practice means that, of all the countries in South East Asia, Cambodia has the lowest toilet coverage. Even Laos, whose record used to be as bad, has made significant strides in recent years in pushing up the numbers of those enthused by the doctrines of 'clean' and 'confinement of wastes' to nearly 50 per cent. Among poorer Cambodians, fewer than 5 per cent have access to a decent toilet facility.

Sanitation promoters in Cambodia have typically had a difficult and unsuccessful time encouraging people to drop the old habit of using the open air. As a result, faecal matter lies about in the environment, contaminating streams, soils and dust carried in the air, and

augmenting the toll of disease. A village the size of Slaeng typically deposits around 450 kilos of pathogenic excreta every week. This



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interacts with a rate of infant and young child mortality 75 per cent higher in rural areas than in urban areas, and with heavy caseloads of diarrhoea and other infections.

So what is the secret behind Slaeng villagers' abandonment of the bush — one and all, young and old, and adoption of the closed toilet instead? The answer is twofold. Local leadership, from Mr. Chan, the chief, and others he enlisted; and an approach by the authorities which focused on encouragement and motivation — not on imposing an alien idea from outside. A striking feature of the approach, a joint government and UNICEF venture, was the lack of material subsidies. Past projects offered subsidies of US\$25 as an incentive to construct amenities, but most of the households who took them up were among the better-off. No-one later copied their example and adopted toilets voluntarily, so the impact was negligible among the poorest and least healthy families.

### Changing behaviour instead of building toilets

'In the past', according to Dr. Chea Samnang, Health Care Director of the Ministry of Rural Development, 'our aim was just to build latrines, not to change behaviour — this was the reason for our failure. There was no involvement from the community, no encouragement and no clear picture of what to do next. What made a big difference in this project was the participation of the villagers in discussing the problem and analyzing the solutions themselves.' Dr. Samnang was surprised at the speed of change in the village — which shows that attitudes and knowledge are more important drivers of new behaviour than cash inducements and crude exhortation.

Toilets were not entirely unknown in Slaeng before the project arrived. Some people (especially women) valued privacy, or felt that they could not entertain guests from Phnom Penh unless their household had a proper amenity. But the health importance of confining ordure had not been previously well-understood. 'We did not know the consequences of defecating outdoors — it was simply our habit,' said Mr.

Chan. 'We were not educated on the importance of good hygiene. But now, we are very excited to have our latrines. Mine is almost full and I'm ready to dig a new pit.' Mr. Chan spent 10,000 riels (US\$2.50) to build his first home toilet. His was among the first 15 families to do so; after this, it was easier for him to motivate others.

The support of other influential villagers was important. Ms. Heu Lon, a convert of household toilets from before the project, believes that having your own facility is far more hygienic than using the fields. 'Open defecation is inappropriate because you spread diseases.' Such diseases include not only diarrhoea, but



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fevers, respiratory infections, and parasitic worms. Ms. Heu was among the village personalities who went house to house to convince villagers that 'if we want our village to be clean, everybody should participate and build their own toilet.'

### Community strictures on 'open defecation'

As in the case of other 'community-led total sanitation' (CLTS) programmes, people who defied the 'open defecation' ban in Slaeng could find themselves subjected to stricture by passers-by. 'Disposing of your bodily waste is a private and intimate problem, only con-

cerning you,' said Mr. Chan. 'It is embarrassing to be told by others that your behaviour is wrong.' Publicly expressed disapproval of 'old-fashioned', disease-spreading habits is an important disincentive, and central to the CLTS strategy.

Slaeng has become a role model of good hygiene to other villages in Cambodia — the neighbouring village of Prey Poh copied its example, and 60 other villages have now been declared 'open defecation free'. After the final toilet was installed in Slaeng — number 94 —

### **Drama to drive home the 'no open defecation' message**

The villagers have made up a drama to illustrate their commitment to ending open defecation. It opens when a farmer on his way home catches a villager defecating in the bush. 'Don't go there please,' he says to the culprit, who promptly moves to another bush, only to be asked to move on again — to his surprise. A heated argument then ensues, in which the chief — Mr. Chan — intervenes. He explains that defecating in the open exposes people to disease, and suggests that the cost of a toilet is less than the cost of being sick. Needless to say, the culprit apologises and is reformed, promising to build a toilet. At the end, the villagers break into song and tell how they conquered their habits and now universally use toilets. The comedy skit and the song were part of celebrations held last November in Slaeng Village, to show their guests how they transformed sanitary practice and to trumpet their achievement: a toilet in every home.

they decided to hold a celebration. The success story attracted commune chiefs from five provinces, including far away Otdar Meanchey and Stung Treng, to learn from Slaeng's experience. All came to the celebration, and agreed that Slaeng Village is really clean. 'I came to seek advice from Slaeng villagers on how to replicate the project in Stung Treng Province,' said Kharn Orn, a deputy village chief from the north-eastern province. 'I want to learn how to motivate people to build latrines and how to achieve 100 per cent coverage fast,' said a villager from Otdar Meanchey.

### **Keeping people on board**

The latrines are very basic: pits dug in the ground surrounded by walls made from tree leaves or plastic sheets. These simple 'super-structures' can be moved when the first pit is full and the time has come to dig another. The test comes when this moment arrives: will all the village households be prepared to make the effort to replace their toilet when it is full, or when it is not as sparkingly new and clean as when it was installed? Ms. Heu and others may need to renew their injunctions — or people may relapse. Getting the young people on board is another way of reinforcing the new behaviour.

Children in Slaeng are pleased that they no longer have to go to the rice-fields, quite a distance from home, for their daily 'visit'. 'It used to be difficult because the grasses in the fields were high and they hurt our skin. And when it poured with rain, we could not go so far.' Their parents told them to use the new toilets instead and to clean their hands with ash or soap afterwards — hygiene education is a critical component of the project. 'I used to be a bit scared to use the latrine at home because I thought a snake would come out of the pit,' a girl said. Now they know that toilets are safe. They also use the toilet house to take a shower, something they used to do in the lake. The vows they and the villagers have taken never to go in the fields again seem to be sincere.

The Ministry of Rural Development, encouraged by the success of the new approach, has now expanded the pilot to 400 villages in nine prov-



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inces, with ongoing support from UNICEF. Only 16 per cent of the Cambodian population in rural areas has access to a clean, private

ized information and motivational activity by the authorities — which we will continue to support.'

*'It is embarrassing to be told by others that your behaviour is wrong.'* Publicly expressed disapproval of 'old-fashioned', disease-spreading habits is an important disincentive, and central to the CLTS strategy.

place to 'go'. This means almost two million toilets need to be built throughout the country. 'Unfortunately, neither the government nor donor agencies have enough resources to pay for this,' reports Ms. Hilda Winarta, UNICEF's sanitation programme coordinator. 'So it is crucial for communities to take their own initiatives, and be encouraged to make their villages clean and totally sanitized using their own resources. This needs well-organ-

The approach to 'community-led total sanitation' now being applied in Cambodia was pioneered in Bangladesh, and is being replicated in countries all over Asia and Africa. This is an innovative way of mobilizing communities to eliminate open defecation through active participation, community analysis and action — without the use of subsidies for every household to build their own facility. ■

# Zambia

## Chief Macha's toilet revolution

The Tonga people of southern Zambia are used to disruptions in their way of life. In the colonial era, European farmers settled on Tonga lands when the main road and railway line were built through their territory from what is now Zimba-

Chief Mapanza thinks this is why, in recent decades, people in Choma would not accept sanitation. 'When you use force, people will resist. That kind of resistance could go on for generations. Perhaps this is what has happened in our country.' Whatever the reason for the long persistence of objections to toilets in this corner of Zambia, in 12 communities in Choma district that resistance has now been broken. And the role of the traditional rulers has been central to success.

The new campaign began in November 2007, when UNICEF introduced the 'community-led total sanitation' (CLTS) methodology into the communities. Another local ruler, Chief Macha, subsequently one of the most energetic of exponents, recalled the first time he encountered people discussing the CLTS strategy in Choma Hotel. 'I was horrified to overhear someone from UNICEF talking about shit, and I confronted him saying that UNICEF must look at the welfare of children, and not at shit. But I was persuaded to join the discussion, and I came to understand what it was all about.' Since then he has taken the lead in Macha's 100 communities.

Chief Macha was one of over 50 specially-trained facilitators for CLTS. After the training, meetings were held in each community. The inhabitants were invited to walk around the neighbourhood, identifying places used



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bwe to the capital, Lusaka, and many people changed their lifestyle and went to work for them. Eighty-year-old Chief Mapanza of Choma remembers those days and the way the Europeans imposed their ideas, even in intimate domestic matters: 'The settlers forced the villagers to dig pit latrines and instructed messengers to inspect the villages. Those that did not have pit latrines were severely punished.'

for ‘open defecation’, and to talk openly about their personal habits. This is done in a humorous manner but the message hits home. Once people realize that particles of faeces left lying about get onto feet, hands, utensils, and into drinking water, and ultimately into peoples’ mouths and stomachs, a sense of shame and disgust overtakes them. For the first time, people in Macha really understood what toilets could contribute to clean and respectable living. There can be no pussy-footing: the ‘s’ word — normally taboo — has to be used. Chief Macha’s campaign, complete with T-shirts, is uncompromisingly entitled: ‘No shit please! One family, one toilet’.

### No toilet subsidies

An important element of the CLTS strategy is that while every effort is made to encourage and advise the communities on technical issues, no subsidy is offered for toilet building. Their ‘s’ problem has to be owned by the community, and solved by the community.

Experience has shown that where toilets are constructed in people’s compounds by public health engineers, they may not be used — or at least, not for their intended purpose — unless the families in question are convinced that a visit to a dark little cabin with a pit is preferable to a walk in the fresh and breezy open air. That act of persuasion and conviction has often been missing. So the CLTS approach gets away from building toilets for people, on the basis that where real conviction has been brought about, people will be happy to build toilets for themselves.

However, if people whose cash incomes are low and for whom a toilet represents a major investment are to not only be convinced of the merits of a toilet but actually build one, the cost has to be within their means. In the past, the only ‘officially approved’ toilets in Zambia were ‘Ventilated Improved Pit’ (VIP) toilets, and toilets that flush, both of which are expensive. Now, under the government’s national water and sanitation programme put in place to reach the Millennium Development Goals, the definition of ‘adequate sanitation’ has been widened. Simpler pit toilets are included, nota-

bly those with a smooth squatting platform, drop-hole and lid. Correspondingly the costs of toilet installation have been dramatically reduced. So now it is more practicable to promote sanitation to new users without having to offer a subsidy.

The CLTS approach engenders a sense of shame and disgust in relation to their old unsanitary ways which ‘triggers’ the members of the community into abandoning ‘open defecation’. At the meeting, time is spent working out how much excreta is regularly deposited in their neighbourhood and what its threats consist of. The costs of poor sanitation are also calculated in relation to medical bills and lost productivity. When they have resolved to abandon open defecation, a demonstration is made of how to construct a simple pit toilet, along with its costs. A village Sanitation Action Group (SAG) is formed, consisting of five men and five women, who assume the responsibility of assisting households to build their toilets and monitoring their use. Where a household is particularly poor or debilitated, the SAG will organize help.

### Amazing results in two months

The CLTS programme in Choma began in November 2007. Two months later an evaluation was undertaken. Within a population of over 4,500, sanitation coverage had risen from 23 per cent to 88 per cent. More than two-thirds of the toilets constructed met the government’s definition of ‘adequate’. In three-quarters of the villages, there was no visible excreta, and these were accordingly testified as ‘open defecation free’.

Chief Macha explains what he believes has happened: ‘The issue of sanitation is not new in my area. However, the approach has given us a boost and the people have enthusiastically embraced it. This is because the villagers are not being asked to construct expensive toilets they cannot afford. All the material and the labour is locally available. It is not UNICEF’s

For the first time, people in Macha really understood what toilets could contribute to clean and respectable living.... The ‘s’ word — normally taboo — has to be used.

responsibility to build toilets, but ours. They are just here to support us and to give us professional advice. I believe every household in Macha will have a toilet by the end of 2008.' Chief Macha has even threatened that those of his subjects without a toilet at that stage will not be allowed to shit.

Although sanitation has been promoted in rural Africa for many years, until very recently there has been a total absence of anthropological research into beliefs, customs and behaviours concerning excretory behaviour. In crowded urban environments, and settings



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where migrant workers were familiarized with toilets in hostels or other living accommodation, people adopt them relatively easily, but not in rural areas. The poor results from many programmes — not only in Africa but in other parts of the world — have finally led to efforts to understand these issues better. In traditional settings that have not changed much over the years, there are rules about where and when men and women are supposed to 'go', and what is acceptable behaviour. Breaches of these rules lead to penalties on offenders. Therefore, in these old-fashioned 'sanitation systems', elders and leaders also played the important role today assumed by Chief Macha and other headmen in the trial communities in Choma. The appeal to community status and self-respect seems to resonate, where 'better health' messages did not.

### One compound, five toilets

One village headman has proved a particular role-model and exemplar. Joseph Mwaanga Simulangu's compound in Chief Macha's area about 60 kilometres west of Choma town has four houses, four kitchens and five toilets. The four houses belong to his four wives and their children. Why five toilets? 'Four are for each of my wives. The fifth is mine,' explains the 81-year-old traditional leader. Headman Simulangu described how, before the programme, the family of 30, which includes his 25 children, used one pit latrine. 'The toilet was always dirty and stinky. It filled up too quickly. Thus we found it more convenient to go into the bush,' he said.

At night when it was too dark, too scary and too unsafe to go into the bush, they went behind the house. 'All you did was carry a hoe and dig a hole and cover it up after you finished defecating. But this wasn't very good because the holes were shallow and they were easily dug up by pigs, dogs and even chickens which ate the faeces,' the headman said. When it was explained how flies transferred germs from faeces to food, Simulangu understood why there were frequent outbreaks of diarrhoea in the family. The only way he could ensure that all four wives and offspring would change their habits was to give them all their own facility. We all know how unpleasant it is to clean other people's detritus, should someone 'miss' the drop-hole: each wife will have to discipline her children. The headman also found it difficult to get used to being seen going into his 'toilet house', but he has gradually conquered his inhibitions.

The question of sustainability — will people continue to use their toilets if they become dirty or full, and need emptying or replacing? — is a critical one. Chief Macha regards the current activity as only the first stage in the process. Where construction is not well-done, the toilet pit may collapse in the rainy season. 'We need to move towards building permanent structures which are safe. If all families work together, we will build better communities. My vision is to build a better Macha.' The 'No shit please!' campaign has mobilized his sense of





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leadership. ‘Now I understand what it means to be a chief,’ he says. ‘To be a chief is to be a community leader. Sometimes it is good to be insulted over your convictions, because you are leading the people.’

### Impacts of toilet enthusiasm

The impact of the toilet revolution has already had an effect on disease rates and on school attendance. The local hospital, Macha Mission Hospital, has noted a reduction in diarrhoeal disease cases since last year. Clinical care manager Abraham Mhango points out that the reduction in drugs and treatment represents a saving: ‘The money can be used on other areas of health care, such as respiratory tract infections. This means our health care will be cost-effective’.

Schools have been a special target of the UNICEF-assisted programme. At Choma Central Basic School, head teacher Phaniel Hachibzibe attributed improved attendance to the project. Cases of absenteeism due to diarrhoeal disease have gone down. ‘We monitor

absenteeism every day, and we have seen tremendous improvement.’

At Siamambo Basic School 10 kilometres south of Choma, new toilet blocks with both pits and urinals, and hand-washing facilities, have been built for boys and girls, and their walls have been decorated with colourful murals and sanitation messages painted by the pupils themselves. The pictures and the inscriptions implore pupils to wash their hands after they use the toilet. Mercy Banda, a teacher at the school, says that both staff and pupils have become much more hygiene-conscious. Jane Siabbeula, a 15-year-old student in Grade 9, has become an assiduous hand-washer. ‘I look at the walls every day and I’m reminded about keeping healthy and clean,’ she says.

The project in Choma is taking place within the framework of the national programme for water and sanitation, and the government’s aim is to have a toilet in every household by 2030. According to a 2005 survey on living conditions, more than 30 per cent of rural Zambians, or 2 million people, did not use a toilet. UNICEF and WHO estimate rural sanitation coverage to be lower than this, at 52 per cent, with wide geographical disparities. Mobilizing all these people is going to be a major task, especially in remote parts of the country where sanitation can be as low as 17 per cent. But officials who have visited Macha to inspect the ‘toilet revolution’ are impressed by the possibilities.

Chiefs from adjoining neighbourhoods have already introduced the CLTS approach within their chiefdoms, thereby expanding the ‘One family, one toilet’ campaign to cover all 480 villages and 173,000 people in Choma district. But everyone is aware that momentum must not be allowed to flag. Much will depend on whether the same energy injected by Chief Macha will be emulated elsewhere. CLTS introduction in more districts and provinces is another matter yet. There is still a long way to go. ■

# Nepal

## School-led total sanitation seems unstoppable

**By Shova Adhikari, Namaste Lal Shrestha,  
Madan Malla and Guna Raj Shrestha**

Chitwan, Nepal: Shanti lives with her young son in Birendra Nagar VDC (Village Development Committee, or area covered by a VDC), in the Chitwan district of Nepal. Chitwan is in the Terai, or lower-lying plains area of this mountainous country, where animal and plant-life abound and the landscape is verdant. But Shanti's situa-



The Shri Rastriya Primary School Child Club

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tion is hard. She is a dalit from the poorest stratum of society, and a migrant with no right to permanent membership in the community. Her husband has gone to India to work in whatever casual labouring job he can find. She occupies a flimsy house on public land behind the Shri Rastriya Primary School, always fearful that if

she upsets the local community they will send her packing.

This school, where her boy attends Grade 11, occupies an important place in Shanti's life. Firstly, it represents the family's future hopes: both Shanti and her husband are illiterate, and she is determined that her son — her one and only child — will succeed in building a different kind of life via education. And secondly, the school's outreach programme for healthy living has impinged on Shanti's own lifestyle and that of other women in the neighbourhood. All the houses in the designated 'school catchment' — a total of 244 — are targeted for full sanitization by 2009, meaning that they will all have abandoned the practice of 'open defecation' and built their own toilet.

The Shri Rastriya Primary School was originally targeted by the UNICEF-supported School Sanitation and Hygiene Education (SSHE) programme. This imparted a sense of responsibility among students for their own hygiene and sanitary behaviour. They took on duties cleaning the school, sweeping the compound, maintaining the toilet blocks, and other actions to improve the school and feel pride in it. Child Clubs were formed — Nepal has been a pioneer in child participation — and became a positive force for development, drawing upon their teachers' and parents' advice, and running campaigns and awareness creation activities to promote public health. Schools also involved Parent-Teacher Associations: Shanti is a member of the PTA at Shri Rastriya Primary School.

## Building on strengths

Until the mid-1990s, little effort was made by the Nepali government to tackle the question of basic sanitation. A 1994 survey reported latrine coverage of only 12 per cent. In 1998, a national sanitation steering committee was set up involving many governmental and non-governmental partners, and the following year, a Basic Sanitation Package (BSP) was developed and carried out in most districts where water supply programmes were underway. The BSP addressed the problems facing poorer citizens in managing to afford the cost of a toilet — 38 per cent of Nepalis live on less than US\$1 a day — by including provisions for revolving loan funds and financial incentives.

In 2000, yearly celebration of National Sanitation Action Week (NSAW) and the School Sanitation and Hygiene Education (SSHE) programme was launched to promote school and community sanitation and hygiene. Within the next few years, 1,000 schools took up SSHE and began focusing on child- and woman-friendly facilities. In particular, they looked at problems facing girls. Lack of separate toilets where they could deal in privacy with menstruation kept many girls away from school after puberty. They felt too exposed to boys' taunts and feared sexual harassment.

Following the international articulation of the Millennium Development Goal for sanitation in 2002, Nepal expressed determination to achieve universal toilet coverage by 2017. Recognizing the success of SSHE and the way in which children in Nepal were proving themselves as agents of change, UNICEF proposed a new model to speed up the pace of coverage. This was School Led Total Sanitation (SLTS), and it was designed to build on the existing strengths of local and internationally-reputed programmes. The approach incorporated basic elements of the School Sanitation and Hygiene Education (SSHE) programme, the reward and revolving fund aspects of the Basic Sanitation Package (BSP), and the participatory tools and techniques of Community-Led Total Sanitation (CLTS) adapted from elsewhere.

Since 2005, the SLTS programme has been set in motion in 15 districts of Nepal where UNICEF is active. Altogether, SLTS is reaching out to



Children and women participating in a sanitation promotion rally

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60,000 households with 300,000 people, with leadership coming from 200 schools — of which Shri Rastriya Primary School is one. There are tiers of sanitation steering committees at regional and district levels, performing supervisory and mobilizing roles. But the key work on the ground is done by school-based Child Clubs and sanitation sub-committees at the community level. They are the bodies that take the lead in most activities, with support from teachers, Parent Teacher Associations (PTAs), school management committees, local women's groups and other community-based organizations.

## The implementation of SLTS

In the preparatory phase, the district school sanitation committee selects the schools for SLTS — they have to have been active in school sanitation for at least a year — and deploys staff to brief the school and community. The Child Clubs are geared up and sanitation sub-committees formed. These have between seven and 11 members, and include a head teacher, a Child Club chairperson, a representative of the PTA and of the school management committee. They map the households in the 'school catchment area' and find out whether they have toilets. Then they develop a SLTS action plan. Training is given to all those taking an implementing role, and publicity materials developed for use during the campaign.

In the implementation or 'ignition' phase, the facilitators hold meetings in the communities, just as in CLTS, and talk openly about defecation. But instead of 'walks of shame' around

open defecation sites, they conduct 'walks of praise' intended to build on people's strengths and self-respect. They seek a positive response to encouragement and motivation, rather than using words associated with shame and humiliation. Flags are erected to mark open defecation sites.

*Within 40 days, 71 toilets had miraculously been built. The Headmaster, together with some of his staff, then went about digging pits to bury the dried and scattered faeces still lying around in the fields.*

Flow diagrams are used to estimate the volume of dangerous material lying about and chart the paths of disease. The outcome is a commitment to abandon 'open defecation' and construct household toilets.

### Support for implementation

Supportive activities continue over the implementation phase. Rules on sanitation and hygiene practices are formulated in the school and community, with fixed rewards. Varied advocacy and awareness generation activities are carried out in schools and communities using different means and media. Information boards are set up and brochures distributed. Fund-raising generates resources for helping truly indigent families. Special campaigns are held during National Sanitation Action Week,

with demonstrations, videos and creative programmes such as street dramas and song competitions. Child Clubs organize exchange visits.

Most importantly, the revolving loan fund is established, with support from UNICEF, government and the Village Development Committee (VDC). In Birendra Nagar VDC where Shanti lives, the revolving fund was supplied with Rs. 200,000 (US\$2,900), and each family could be given a loan of about Rs. 4,000 (US\$58.00) for a period of six months to one year without any interest charge. The cost of a moderately priced toilet is around Rs. 5,000 (US\$72). So far, there is a 100 per cent record of loan repayment. 'People who are poor are very careful with loan repayment because they fear losing their house and their land if they fail,' Shanti explains.

In Shanti's case however, obtaining a loan is difficult. 'The users' committee is reluctant to disburse the loan to a squatter family. Once the loan is given, the implication is that we have been granted legal recognition to settle in the area for ever.' Here is an indication that the poorest, the dalit and landless people may be excluded from support — even though they are the ones who need it most. Shanti is hoping that her husband will send her enough money to build her own toilet to get around this problem.

### 'We have done it, Sir!'

The community of Dakshin Ayodhyapuri lies in a remote part of Chitwan. The Chepang and Praja people who live in these forests are tribals without landholding status, and are among the country's most underprivileged. Despite the difficulties of introducing sanitation in such an area, the primary school Headmaster determined in 2007 to make the school catchment area of 126 households 'open defecation free'. The Headmaster, teachers and students visited every single home to discuss construction and use of toilets.

Within 40 days, 71 toilets had miraculously been built. The Headmaster, together with some of his staff, then went about digging pits to bury the dried and scattered faeces still lying around in the fields. So impressed, and so ashamed, were the inhabitants to see the Headmaster cleaning up their shit that they insisted in taking over the job from him. The Headmaster then offered a prize to any student who found faeces lying around and reported the culprit's name.

The long vacation then intervened. After weeks away from school, the students rushed to greet the headmaster, clinging to his arms to be the first to report that they had rigorously used the new toilets and washed their hands with soap after defecation. Now, they said, they would be the ones to give a prize to their Headmaster if he could spot any visible trace of a public nuisance. 'Open defecation free' status has been gained, largely thanks to the leadership role the Headmaster in Dakshin Ayodhyapuri personally assumed.

In the meantime, she is sharing the toilet of one of her neighbours, Asha Ram Chaudhary. Asha was able to take a loan, and Shanti reached an understanding with him that if she provided building materials and gave her labour, she could use the toilet until such time as she could build her own. 'I would definitely feel proud to have my own toilet,' she says. But for the time being, she is one of only three households sharing their toilets, while another 56 still have temporary or rudimentary facilities. The rest — 185 families — have all built permanent facilities.

When there is no further 'open defecation' in a school catchment, the flags can be taken down and the community declared ODF: open defecation free. So far, this has happened in 75 school catchments, 25 settlements and four VDCs. Another 125 school catchments are close. Each school responsible for a catchment receives an award of Rs. 10,000-20,000 from the district committee. Reports are given to the authorities and the media, and then regular monitoring begins. Suggestions will be made for upgrading where a toilet is very basic and liable to collapse, fill up, or become unpleasant. Emphasis is also given to hygiene behaviour and washing hands with soap.

### SLTS outcomes

Apart from the progressive construction of toilets, there are many positive outcomes from SLTS areas. The programme has built new bonds within communities, mobilizing students, teachers and households for joint action. The materials needed for construction — pans, pipes, fittings and cement — are available in local shops, enabling them to expand their business.

A new pride is visible in ODF communities. People have started sweeping their yards more frequently, organizing waste water disposal systems, digging pits to bury their garbage, and setting up tables with basins of water and soap for hand-washing. Among children in school, attention to hygiene has markedly improved. Where there are difficulties in overcoming barriers to full sanitation, the schools and communities have come up with their own solutions. Their joint ownership of SLTS has generated resources, capacity, and management experi-



An Open Defecation Free celebration in Chitwan District

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ence to meet the ODF goal. This characteristic of SLTS means that there is a good chance that progress and behavioural change will be sustained.

A vitally important question concerns the impact on health. In the end, the adoption of toilets is supposed not only to enhance self-respect, but to bring about a reduction in disease. The results in this context appear encouraging. The number of cases of illness in ODF communities is definitely perceived to be lower, as is the number of children failing to come to school because of diarrhoea or worms. Girls not attending school because they are poorly — meaning that they are menstruating, and dare not attend in case of being seen to bleed — are also fewer. The health post records and those of community health volunteers show reduced frequency of diarrhoea in the ODF-declared communities. In one VDC sub-health post, reported cases of diarrhoea in the under-fives went down from 7% to 5% between 2005 and 2007.

There is still a long way to go to reach universal sanitation in Nepal and many barriers to overcome. These include the long political resistance to seeing sanitation — as opposed to water — as any kind of national priority. But for those who are skeptical, there is now evidence that placing the problem in the hands of schools and communities and enabling them to take the lead, can have a transformative effect on the health and morale of hundreds of thousands of people. ■

# Sierra Leone

## Singing about the unmentionable

Tilorma, a small village in Kenema district, is the first in eastern Sierra Leone to commit to eliminating open defecation. On 3rd August 2008, the village held a triumphant celebration where the children sang 'kaka don don o, Lef for kaka na bush' ('no more excreta in the open and stop defecating in the bush') whilst dancing to drums and parading the gorboi, a traditional masked devil, around the village.

Six months previously, the people of Tilorma took part in an important sensitization exercise. Visitors from the Ministry of Health, UNICEF, NGOs and community organizations showed them — by actual demonstration — how flies travelled backwards and forwards from excreta left exposed in the open, and deposited fragments on their food. For the first time, the villagers recognized that they were actually eating each other's faeces.

They were profoundly shocked, not least because they now recognized the important link between open defecation and disease transmission via the 'faecal-oral' route. In 2004, there had been an outbreak of cholera in the Kenema district, leading to many deaths. So they now decided that the building of latrines was vital, as well as insistence that everyone use them, something which has ultimately lead to Tilorma being 'open defecation free'.

Despite their enthusiasm, the villagers faced many constraints. Sierra Leone is impoverished and only just recovering from a 10-year civil war. As a result copious amounts of emergency relief



*A young girl, dressed in traditional attire, dances at the Open Defecation Free (ODF) celebrations*

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have poured in. In many rural communities this has created a sense of dependency on outside interventions as opposed to taking action for themselves.

In the past, the international community has supported sanitation programmes which rely on the provision of materials and often labour, for the digging of pits and building of toilet houses. In contrast, the new Community-Led Total Sanitation (CLTS) philosophy states that no subsidies

or building costs should be donated from outside the community. Once a village has made a plan to introduce 'total sanitation', it is up to them to put it into effect.

### Motivation — and reluctance

Mahmud Konneh, a farmer from Tilorma, was one of those who received CLTS training at the introductory workshop. Mahmud lost his grandmother to cholera in 2004; this became one of the motivating factors for building a toilet, triggered by his training experience and the subsequent field visit to the village.

'We found it very difficult in the beginning to accept that we ourselves should build our own toilets with our own local materials,' explained Mahmud. This was echoed by Yambasu Koker, a facilitator from UNICEF's partner NGO, GOAL. Following the initial excitement, Yambasu has been working hard to sustain awareness and promote toilet construction in Tilorma, working with Mahmud and others he identified as natural leaders for such a mission. 'At first, we were very pessimistic about whether people would accept the project,' said Yambasu. 'They became very interested during the "triggering" stage, but later when the novelty wore off, requested subsidies. In the end, after a lot of work, we managed to change their minds.'

Yambasu's key ally was the village's most prominent figure, Chief Boima Swarray. The Chief declared that open defecation must end and set up a two-man team to patrol the village every morning. Villagers who did not keep their surroundings clean were cautioned and those seen defecating in the open were taken to the Chief for correction. 'Eighty per cent were willing to adopt the project after awareness was created,' says Chief Boima. 'The by-laws are simply to ensure complete compliance.'

The commitment of Tilorma's leadership was critical to the success of CLTS in the village. Thirty latrines have been built so far, to serve 600 of Tilorma's residents. Mahmud has built one of them himself, a two-compartment structure with one compartment for children and one for adults, to be shared by his own five-member family and those in two neighbouring houses. Mahmud's nine-year-old daughter, Rugi, is a dedicated user.

Rugi has learnt about the connection between excreta and disease, and as a result she now regularly washes her hands with soap. She is also a



A billboard on Tilorma village's attainment of ODF status at the entrance of the village

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strong advocate for CLTS in Tilorma: 'Today, I can say that diarrhoea and cholera have gone from my village,' she states.

More toilets are planned so that, eventually, every family will have their own. At present, the building materials used are all natural, cheap and locally available (palm fronds, sticks and gravel). 'During the next year we will improve the toilets with cement and better construction', says Chief Boima. 'We have also established cassava farms, and will use the proceeds to improve our toilets.' If Tilorma can keep up their sanitary progress, they will act as a CLTS showcase and inspiration for other communities in Kenema — and the country at large.

### Inspiration is needed

Inspiring examples of clean communities are vital in a country whose infrastructure and trained personnel are only just beginning to get back on their feet after the war. A 2006 study showed that only 30 per cent of people in Sierra Leone have access to improved sanitation; in rural areas the proportion was even lower (17 per cent). Just over 10 per cent of people had access to both clean drinking water and sanitation. Lack of sanitary facilities and poor hygiene is a major contributory factor to Sierra Leone's exceptionally high under-5 mortality rate (267 per 1,000 live births), the highest in



Participants of the Community-Led Total Sanitation workshop in Kenema

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the world. Maternal and infant mortality are also among the highest, also in many cases attributable to poor sanitation and hygiene.

This situation has prompted the government of Sierra Leone, together with UNICEF and the UK's Department for International Development (DfID), to embark on a five-year programme to improve water supplies, sanitation and hygiene (WASH) across the country, with a special focus on rural areas.

Previous target-driven sanitation programmes, emphasizing coverage and numbers of toilets built, had proved unsuccessful: people in many cases failed to use the new facilities and were unable to grasp the link between poor hygiene and disease. This was the background to the agreement to try out CLTS, a community-led sanitation approach originally developed in Bangladesh and successfully exported to a number of countries in Asia, Africa and Latin America.

However, promoting a strategy based on community self-empowerment without the benefit of external support was something of a risk. The new approach went against the grain of existing programme patterns and expectations of officials and communities. It therefore required extensive training at all levels, from senior officials in Ministries of Health and Environment, to members of the community.

The CLTS workshops held in early 2008 in Kenema and two other districts were designed to

set this process in motion. Altogether, 160 participants representing all 13 districts of the country (government officials, NGOs and community members) took part in the workshops. The process was organized in such a way as to test a number of different constraints. It was important to find out whether there were areas – by the coast, or in towns for example – where CLTS might be less effective or simply not work at all.

What impressed the organizers the most was the extraordinary enthusiasm of the workshop participants, following their introduction to the CLTS concept. After initial training, they were divided into teams and sent to hold community meetings in pre-selected villages. Here they put into practice the techniques they had been taught: the mapping of open defecation sites via a 'walk of shame', the faeces and flies test and other demonstrations showing different routes of faecal-oral disease transmission, as well as estimating the health and economic impacts of open defecation.

As a result of the three workshops and field-based action, a total of 34 villages were 'triggered' to take action. Leaders from these communities then attended the workshop to explain their plans for creating ODF villages. Finally, the more senior district representatives worked together to formulate plans for institutionalizing CLTS and taking it forward in the following months.

### 'Triggering' is not enough

In some parts of the world, CLTS has taken off so fast that within a matter of weeks, communities have built a full quota of household toilets. This however has not been the case in Sierra Leone where progress has been much more gradual. UNICEF and the Ministry of Health had hoped that at least one village could be declared 'open defecation free' (ODF) in time for World Water Day celebrations (20 March 2008). They soon discovered that this was not to be the case.

One of the communities that had shown the most initial promise was Ogoo Farm, a village just outside Freetown. However, a spot-check carried out a few weeks after the workshop found that construction works had stalled at the point of



pit-digging. No toilet had yet been completed. The visitors were understandably disappointed, and it was difficult not to relapse into lecturing the defaulting community.

This experience showed that continued engagement with triggered communities by community organizers was necessary to ensure that projects were completed. Triggering alone was not enough — having dug their pits, the people of Ogoo Farm became confused about the next steps. They needed technical support with toilet design and advice about construction. And they needed the stimulus provided by regular contact from someone such as Yambasu Koker, his encouragement to Chief Boima, Mahmud Konneh and others, and reminders that people were putting their health at risk by continuing their old habit.

The experience of CLTS in Sierra Leone illustrates how hard it is to bring about a permanent change in attitudes in such an intimate area of people's lives — and one in which their existing behaviour is so entrenched. It is equally difficult to convince programme staff to place the responsibility for change in the community's hands, rather than follow the familiar patriarchal pattern of authority and dependency and dictate to villagers what they should do. It was found that facilitators and government officials quickly relapsed into a top-down mentality unless there were constant reminders and refresher trainings. Without this essential follow-up, progress inevitably stalled.

### A special impact on children

On a more positive note, an inspiring aspect of the programme has been the way in which CLTS has engaged children. In Sierra Leone, it is the children who suffer the most from the effects of poor sanitation and disease. In Tilorma, for example, community members said there might be five child deaths a month due to diarrhoea. Through CLTS, children can become key figures in bringing about a reduction in the diarrhoeal infection load.

During the village exercises, special facilitators worked closely with children, using the CLTS tools, mapping defecation sites and faecal-oral contamination routes to help the children ana-

lyse the sanitation situation. They often turned out to be the best sources of information for facilitators because children are more open and honest than adults. In one village, children led facilitators to a large house that belonged to the late paramount chief, some of whose rooms were now used for defecation, despite the presence of two toilets in the building. The children described it as 'Kaka House'.

In all the villages, children developed songs and slogans about the evils of 'kaka', asking that their parents build toilets to stop the spread of disease. They would go through the villages singing their songs, and in several cases this was a turning-point in persuading the village to commit themselves to ending open defecation. Some young people have also become 'clean village' leaders within their communities. During the last day of the workshop in Kenema district, several children represented their villages and actually helped to lay out future sanitation plans.



Mahmud, with wife and children, pose in front of their newly built latrine

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Ideas that the older generation may have a hard time accepting often appeal to youngsters who are less set in their ways — in sanitation as in other areas. Although the initial excitement surrounding CLTS generated over-optimistic expectations and has proved much harder to consolidate than anticipated in Sierra Leone, the mark it has made and will make on many young minds augurs well for an 'open defecation free' future. ■

# Nicaragua

## 'Being dirty had to end'

La Horca, a small and remote village in Nicaragua, has recently adopted all-round sanitation — not just toilets, but wash-stands, wastewater drainage, and corralling the goats which were contaminating household compounds with their droppings. 'In the past, we had not heard of hygiene,' says the chairman of the village Water and Sanitation Committee (CAPS). 'But when we knew that being dirty was unhealthy and inferior, it had to end.'

La Horca is deep in one of Nicaragua's coffee-growing areas. But since coffee prices tumbled and the large plantations laid off labour, small farmers have a hard time making ends meet. Their pockets of land are unproductive and towns where they can market their produce are far away. Until recently, markets were only reachable on horseback over stony dirt tracks. But there is now a passable road. That road is part of their sanitation story.

### The story began with water

When the state water company, ENACAL, with UNICEF's assistance, began operating a rural water and sanitation programme in the Matagalpa region many years ago, villages put their top

priority on water. This is common throughout the world. However, ENACAL had settled on an integrated approach: a village keen on water would not be assisted unless they made a commitment to sanitation as well.

The most important aspect of ENACAL's programme strategy was its emphasis on participation and community self-assessment. NGOs and other government bodies have long been



Families in La Horca convene to devise their Community Action Plan

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active in poverty-stricken Matagalpinas villages, including in sanitation. But they have imparted an attitude of dependency. Villagers describe how this or that organization would arrive one day, make a speech about their intentions, and then proceed to construct toilets in their compounds. These were built to each organization's individual specifications. With slightly different dimensions, designs, and materials, these consisted of cabins on plinths with steps up to the door, situated over pits. Apart from asking the householders where to put them, no local discussions took place.

Not surprisingly, people did not use the toilets properly or keep them clean so they soon began to smell. Children did not use them at all: the steps were steep and they were frightened of the dark cabins. In some villages this building process happened twice or even three times, each time according to different specifications so that old toilet infrastructures were simply abandoned. This has left a strange spectacle of defunct toilets all over people's plots.

And still no effort had been made to explain why sanitation and hygiene were important. When Hurricane Mitch came through in 1999, several local villages including La Horca suffered an outbreak of cholera. The horrors are still etched in people's minds.

ENACAL's approach was entirely different. When a village requested their assistance, their team started by consulting its leaders, visited all the houses to observe existing water and sanitation practices, and summoned village meetings. Using a special participatory methodology, they then invited the community to make their own self-assessment, appoint a Water and Sanitation Committee (CAPS) and develop their own community action plan. This process enabled communities to take responsibility themselves instead of letting others 'do sanitation' to them and then drive away.

In La Horca as in most villages requesting help, water was the villagers' main concern. But unless a drilling rig could be brought in, they had no way of developing a new supply. So they decided to build a road several kilometers long so that this could happen — and they managed

it. A solar-powered pump was then installed over a borehole. After this they had to choose someone who could take on its operation and maintenance after appropriate training, and set up a system for paying his (or her) expenses.

Along with attention to the water supply, the people of La Horca were introduced to the concept of clean living. Once they thought about it, they had to acknowledge that they were living in squalor. There was rubbish strewn around, animals on the loose, and filth left about in the open. Existing toilets were not being kept clean, and therefore they were not being used. Reasons for this were discussed. It turned out that, too often, these toilets were not seen as an



Handwashing is an element of the 'clean living' life-style in La Horca

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opportunity for dealing effectively with a noxious nuisance, but as places which represented a noxious nuisance. This had to change.

After realizing for the first time that dirt, excreta and life-threatening conditions such as cholera were intimately connected, La Horca decided to adopt 'total sanitation'. This meant a package of measures to support healthy living: clean compounds, toilet usage including by children, containment of livestock by gates and fences,



A local mason improves his masonry skills in sanitation at a training in the Matagalpa region

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dug pits for solid waste, and washstands for bathing and laundry with wastewater drainage.

### La Horca today

A stroll through the village of La Horca today, or of other ENACAL-assisted villages in Matagalpa, illustrates that sanitation is not an event or a building, but a mind-set and a life-style aspiration. The process can begin, as here, with a road, which itself is a route to other developmental improvements. Once the desirability of 'clean living' has captured the imagination of villagers, and their leaders have decided to enforce an action plan and new community standards, a great deal is possible even with limited resources.

But the efforts never end: recalcitrant householders who let their toilet fall into disrepair, water collecting in stagnant ponds after a shower of rain, or rotting rubbish piles which breed insects and need to be cleared away, remain ongoing concerns. And some villagers — now improving their earnings thanks to the ease of getting produce to market along the road — aspire to more facilities: a smarter toilet cabin, a biogas plant, a better wash-basin, tiled paths or a concrete apron around

the house to make sweeping much easier and keep the endless mud at bay.

The Water and Sanitation Committee can respond to the ongoing setbacks and opportunities. Its initial responsibility is for overseeing the construction of facilities according to the community plan — supervising the masons, assuring a supply of materials, keeping the household's payments up to date. But after the plan has been fulfilled, they are supposed to monitor and continue to promote clean living. Their activities and the energy they devote to them determine the prospects of 'sustainability' — in so far as this can ever be assured. Effective delivery of change encompasses many different aspects, from the financial to the technical, the regulatory to the social. Whether communities 'sustain' their commitment to sanitation is ultimately up to them.

Committees often conduct household visits and inspection tours. They may impose penalties if they feel a particular family is deliberately lagging. In La Horca, three families were unwilling to comply with the village plan for the universal construction of toilets. After several visits from Committee members, and offers of free labour to help dig their pits, the families gave in. 'The reasons they were reluctant were laziness and costs. A toilet is expensive — it can cost as much as \$400 including all the materials. But they also preferred going in the fields because then they would not have to clean it. In the end, we stressed the dangers of disease, and they complied.'

In another village, El Portón, local women health promoters attached to the Committee visit households and engage in 'charla' — meaning that they speak about health and hygiene. They check up whether houses have decent toilets and are using them properly. Here too they already had toilets, but they were built without consultation and rarely used. 'Only ENACAL and UNICEF have talked to us about hygiene and made us aware. This is the first time we have really played a part in a project and become responsible for its success.' When someone is recalcitrant about hygiene, the volunteer may fetch the Health Visitor from the clinic to accompany her. And

if a family is causing a nuisance that affects the whole community, 'we all go and clean her house. After this, the woman will be too shy to allow it to get dirty again.'

In a third village, El Paraíso, people were very keen to obtain a new water supply because the wells they were using dried up in the hot season and this created a lot of tensions in the village. But when the ENACAL team told them that there would be no investment in water unless they changed their hygiene habits, including installing waste bins and accepting the need to use household toilets, they resisted. They said they only wanted water — they already had latrines which they didn't like. Only half the villagers were prepared to use them for their proper purpose.

Eventually, the whole community came together and understood that wastewater disposal and sanitation were a must. "We understood," said the village chairman, 'that without sanitation, standing water in the village could lead to new outbreaks of disease.' Today, the situation has changed dramatically. 'Our children no longer have diarrhea. The water they used to drink in the dry season was terrible. And thanks to wastewater drainage, there has been a drop in malaria too.' The long process of insistence by ENACAL and UNICEF has paid off, and the women of El Paraíso are not likely to return to their old ways.

### Demand — and supply

There is no doubt that the dependency issue is important in this part of rural Nicaragua. Apart from the fact that it has fostered a spirit of waiting for outsiders to come and do things for poor communities, it has prevented economic development — the creation of jobs and services — around the business of water supplies and sanitation. When an income can be made, those with skills and entrepreneurial flair will help promote demand — in order to supply it.

Rafael Díaz, a Nicaraguan engineer who until his retirement worked for UNICEF in countries all over the world, puts it this way. 'For years

we expected the facilities we installed in poor communities to be managed voluntarily. Now I am convinced that we need to make it possible for people to earn a living out of this. Only when the community levies fees, reads the meters, buys spare parts, hires technicians to make repairs and fires them if their work is shoddy, will you have real community ownership and management.'

In 2004, Díaz began a retirement project: the training of 'Enterprising community builders', masons who would be able to install water-seal

*"Sanitation is not an event or a building, but a mind-set and a life-style aspiration"*

pit toilets, hand-washing and laundry stands, showers, wastewater and storm water drains, water-butts and water-filters, and other kinds of domestic improvements. Several courses have since been held in the Matagalpa region. Trainees with building skills were identified by ENACAL from villages where projects were on-going. Candidates have to pass a test and gain a certificate of competence. Díaz and ENACAL have run the course several times, and the curriculum is soon to be formally adopted by the National Technological Institute.

Given the scattered pattern of rural settlement, as well as the history of philanthropic activity which builds facilities for nothing, this is a difficult environment in which to build a trade. Many villages are too small and too poor to sustain independent artisanal workers. One determined trainee is Jerónimo Valverde. His village, Llano del Boquerón, contains only 48 households, and it takes an hour on horseback for him to reach a road where he can pick up a bus into town. Valverde describes how, when he finished his training, he spoke at a regular village meeting. 'I told them, I am not a professional mason, but I am here to support my community. If someone wants a toilet or a water cistern, or to line the well, I am ready. But you have to pay for my services.'

In time Valverde gained a construction contract from an NGO. Many trainees' main source of income is from NGO-sponsored water-point and toilet building. Even if this pattern of service delivery is not ideal, at least the fees are now entering the local economy, rather than going to contractors brought in for the purpose. Valverde has also taken on private commissions to construct rainwater harvesting cisterns and water filtering jars — his wife has been an active promoter of his wares. He invested his earnings in a horse and tools, and is now available for hire as a carpenter too and offers his services in other communities.

Valverde has yet to obtain private orders for toilets. But Donald Martine, a more recent

trainee from El Ocote, a larger community closer to town, expects to make a good living from them. His father was a mason, and he is keen to expand his skills and the range of products he can offer. He was closely involved with the ENACAL water and sanitation project in El Ocote and from there was enrolled on the training course.

Martine sees a bright future for toilets. 'When I and my wife have our own water-seal, others will see it and want one too.' Whatever the health benefits, it is the social appeal and status of having a decent household facility which is most likely to fuel future sanitation spread in rural Nicaragua. ■

# Bangladesh

## Tackling menstrual hygiene taboos

By Kathryn Seymour

In Char Bramagacha village, northern Bangladesh, monthly periods are secret and shameful things. Old menstrual cloths are buried in the ground for fear that evil spirits will be attracted to the blood. During their periods, women and girls sneak off to the tubewell before dawn to wash themselves before anyone else is up. In between, they hide their cloths so that their fathers and brothers never chance to see them.

Other taboos and superstitions surround menstruation. 'We are taught that things will be spoiled if we touch them during our periods,' says 14-year-old Shopna from Char Bramagacha. 'We can't touch food, cooking utensils or the kitchen gardens.' Monira, 17, adds: 'And we can't go to the temple or the mosque. Hindu girls can't touch cows or even the cow-shed because cows are holy.'

Such beliefs are common across Bangladesh. Some women do not leave their homes for seven days each month. Others observe dietary restrictions or refrain from reading the Koran. While many of these practices are not harmful, the widespread beliefs that menstrual blood is polluting and dangerous, and that the menstruating body is weak and shameful, lead to behaviours that expose women to health risks.

As part of a new hygiene promotion initiative under the SHEWAB (Sanitation, Hygiene Education and Water Supply in Bangladesh) programme, community workers have been trained to address these issues. Amina Khatun is the community hygiene promoter for Char Bramagacha. Amina meets regularly with Shopna, Monira and girls in local schools to



Amina discusses menstrual hygiene with a group of adolescent girls in Char Bramagacha

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talk to them about hygiene, especially menstrual hygiene.

### Poor hygiene leads to increased health problems

Mothers almost never speak to their daughters about menstruation, so a girl's first period can be a frightening experience. Monira recalls: 'I was too scared to speak with my mother. I was lucky to have my sister-in-law to talk to when it happened.'

Most Bangladeshi families are too poor to buy sanitary pads, and instead use rags torn from old saris and other clothing. Like others, Monira used to rinse her rags in water from the well without using soap, and hide them behind beams in the house or in the roof thatch where they grew mould. 'I put the rags in any crack where no-one would see them. They were always



Thanks to Amina's assistance, Monira now feels comfortable drying her cloths in the backyard

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wet.' Using rags that were wet and not very clean caused Monira severe itching and infections.

UNICEF, a key supporter of SHEWAB, recently conducted a survey about how Bangladeshi women manage menstruation, and found that at least one third hide their rags in dirty places. One in three girls fail to change their cloths frequently or wash them with soap after use. Only just over half of the women dried their rags outside and in full sun — the conditions required to kill bacteria. Low standards of menstrual hygiene lead to widespread vaginal and urinary infections.

To make matters worse, women and girls in poor families tend not to seek medical help, even for serious infections. The 2004 Bangladesh Demographic and Health Survey found that over half of women follow their husband's say on whether to seek medical treatment. Even if the man decides that his wife or daughter needs medical care, one third of women cannot travel alone to a hospital or health centre. On top of this is a reluctance to discuss reproductive health issues. So women suffering from vaginal infection rarely receive treatment. This makes the prevention of such infections by education particularly important, especially among those in poorer and less educated families where all taboos and inhibitions are at their strongest.

## Promoting hygiene at school and in the community

Amina Khatum began working with the girls at the Char Bramagacha school a few months ago. Hoping to set up hygiene education groups, she approached women in the community about conducting courtyard sessions; she talked to men about setting up planning discussions at their tea stalls; and she approached Ms Farida Parvin, the teacher of an NGO-funded non-formal school about starting hygiene education classes with her students. These all dropped out of formal education or were never enrolled in the first place. All are in their early to late teens and most girls have started their periods.

'Amina comes to visit our school once or twice a month to talk about the proper use of latrines, hand-washing and hygiene,' says Ms Parvin. 'Before Amina came, I knew about these because they were in the school curriculum already, but menstrual hygiene was very new for me. At the beginning the girls were very shy and felt ashamed, but they've started learning now and are asking questions. It helps me too, to have learnt so many new things from Amina.'

Amina describes what she does. 'We explain that menstruation is a natural thing, but that it must be looked after properly for girls to become healthy mothers. Then I tell a story from our training module about a girl who died because of poor menstrual hygiene. I also explain that there will be bad smells from bacteria if they don't listen to what we say. That makes a strong impression.'

One module of the SHEWAB curriculum shows the sanitary napkin as the best choice of menstrual cloth, but that is unthinkable in the villages. So Amina doesn't mention the napkins. 'Instead, I try to see what is available, and how to keep that clean and hygienic. If I spoke about pads, the people would be frustrated,' says Amina.

The girls now have a wealth of knowledge about good menstrual hygiene. 'Earlier we would use whatever rags we could find, but now we are more careful to make sure they are clean,' says Shopna. Kumari aged 12, adds: 'I know now that I should dry my cloths over the bamboo



### Drying menstrual rags in the rainy season

Shilpi, a promoter in Narsingdi village had great success in convincing all the members of her adolescent girls' hygiene group to dry their menstrual cloths in the sun. However, once the rainy season arrived, the girls returned to using damp cloths. There was just not enough sunlight each day to fully dry the rags.

Shilpi devised a solution. She encouraged all the girls to borrow their mother's kacha – large cane baskets used to carry vegetables from the field and to the market – and place them upside down over cooling cooking fires. 'After cooking, there is still a lot of heat in the embers and clay of the ovens,' says Shilpi. The girls now use clean and dry cloths all the time, and find that itching no longer troubles them.

clotheslines in the sunlight. At first, my parents didn't like it. My mother said: "Oh, you've become so modern." But then Amina came and spoke to our parents and explained. Now our mothers have also changed their behaviour.'

'We all share knowledge with sisters and friends about this now,' says Navoni aged 12. Not only are such ideas spread by the girls in their families, but Amina also works with the entire community. She has run menstrual hygiene sessions with 14 different groups, each attended by around 20 women and girls. 'People feel less shy after the sessions so it's a good start,' she says.

### Building latrines to encourage better hygiene

Although Amina has been able to get people talking about the issue, she still has a long way to go in ensuring that the women and girls in Char Bramagacha have decent toilet facilities and privacy to carry out the practices she promotes. 'I'm encouraging people to install better latrines. Currently there are only 22 hygienic ones in the village. Everyone else goes in the 308 unhygienic latrines or out in the fields.' The unhygienic latrines are mostly built of bamboo and cloth sacking and are not discrete enough for women to use in daytime. This makes it difficult to change menstrual cloths regularly.

The students at Parvin's school say that lack of toilet facilities remains their main problem. 'Before, I used to miss school for four days each month,' says Shopna. 'Even now attendance is still a problem because there is no good place to change our cloths at school. If there were such a place, and somewhere to dump them it would save time.' Currently most of the girls return home during the day if they need to

change their cloths, which means they miss at least one hour of school.

But persuading people to build latrines in Char Bramagacha is difficult. It is in an area which floods heavily every year when the rivers rise throughout Bangladesh. The village becomes an island only accessible by boat, or by wading through deep water. 'Last year all the houses were six feet under water for 14 days,' says the Union (local council) Chairman, Mr Anisur Rahman. 'Many houses used to have latrines, but the flood damaged them. This is what led to our low level of sanitation.' To spend scarce money on building a proper toilet when it may easily be washed away is not a popular idea. Yet Amina persists and is currently lobbying the council to use 20 per cent of a government development grant on improved sanitation.

Finding a water source where they can bathe in privacy is another problem for girls and women in Char Bramagacha 'There is no screen around



Amina has taught Monira and the other adolescent girls how to properly wash their cloths with soap and water

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our well, so I go down early in the morning before anybody else is there,' says Kumari.

### The wider SHEWAB programme

Education on menstrual hygiene is only one of Amina's activities under the SHEWAB programme. The promotion of sanitation and hygiene practices in schools generally, and her neighbourhood meetings, also affect standards of women's health.

More than ten thousand community hygiene promoters like Amina are working in villages under

### Involving men in women's business

Many Bangladeshis believe that if a man walks past menstrual rags or sees menstrual blood, misfortune will befall him. Consequently, community hygiene promoter Nurul Islam was uncomfortable discussing menstruation hygiene, although it was a part of his role to educate the women and girls in his village about the dangers of using dirty rags.

Nurul shared his problem with fellow promoters during their weekly meeting. With their advice, he came up with a plan. 'After our meeting, I invited Amina Khatum from Char Bramgacha to come to my village to speak about menstrual hygiene. I introduced her to everyone and we worked on the issue together. Because Amina is from a village that is very close to ours, some of the women knew her. This made it easier for her to work with them.'

After Amina's first session with the women in Nurul's group, they were less shy. Having Nurul participate in the discussion was also helpful as it showed the women that they didn't need to be embarrassed about the issue in front of men.

Amina tries to involve men and boys in her menstrual hygiene sessions whenever possible. At school sessions in her own village, she includes the boys in some of the menstrual hygiene discussions. 'I don't just include the girls because it is important for everyone to know about the proper practices,' says Amina. 'Boys and men can encourage their mothers, sisters and wives.'



Community Hygiene Promoter Nurul Islam speaks about menstrual hygiene with his female colleague Amina

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SHEWAB to promote better hygiene practices and the importance of safe sanitation and water, as well as tackle taboo issues such as menstrual hygiene. Funded by the Department for International Development (DFID) of the UK and supported by UNICEF, SHEWAB aims to reach 30 million people over the next four years. The programme is working in 68 upazilas (districts) in low-lying areas and the Chittagong Hill Tracts to assist the installation of drinking water and sanitation facilities, and ensure that knowledge of good hygiene enables people to safeguard their families' health.

The largest intensive sanitation, hygiene and water improvement programme ever attempted in a developing country, SHEWAB aims to improve the living conditions and health of families across Bangladesh. If its promise can be fulfilled, SHEWAB will assist Bangladesh to achieve Millennium Development Goal (MDG) seven, and halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation. Improving access for women and girls to water and sanitation and encouraging better menstrual hygiene also contributes to another MDG: to promote gender equality and empower women. ■



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