Footsteps 67

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Working towards urban renewal

by Dr Ambika Rajvanshi



'Agents of change' are able to educate and motivate people.

Asha is a health and community development programme in New Delhi, India, that believes it is not enough simply to provide medical care in the slum communities. It believes the only way to bring about real and lasting improvements to these communities is through a holistic approach to community health.

Asha (the name means 'hope' in Hindi) works in the slums of Delhi, where conditions are very difficult:

- Over 3 million people live in 1,500 slum colonies.
- The average house measures just 2 by 3 metres but is home to six to eight people.
- One water pump serves, on average, 1,000 people.

- Many slums have no sanitation facilities.
- 40% of children are severely malnourished.
- 75% of men and 90% of women are illiterate.

By definition, slums are informal settlements built on any unused public lan d that migrant people can find. They are often built near railway tracks, drainage canals or low-lying areas likely to flood. Slum dwellers typically live in small huts constructed from whatever materials can be found. The huts, which are crowded together along narrow mud lanes, lack proper ventilation and offer little protection from the extreme heat of summer, the rains of the monsoon and the chill of winter. Disease and fire are ongoing problems. Slums suffer from serious environmental disadvantages and lack basic facilities. Residents have to cope with clogged drains, stagnant ponds, poor water supply and inadequate waste disposal and sanitation. These problems become worse in hot weather and the monsoon rainy season.

People's environment, particularly their access to sanitation and safe drinking water, has a major impact on their health. As well as providing healthcare, Asha sees improving facilities and the local environment as key to its work. It develops and supports empowerment and self-help schemes for slum dwellers, particularly women and children. Through the mobilisation of the slum communities, people find motivation to improve their environment.

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Footsteps

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Footsteps is free of charge to individuals working to promote health and development. It is available in English, French, Portuguese and Spanish. Donations are welcomed.

Readers are invited to contribute views, articles, letters and photos.

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Tearfund is an evangelical Christian relief and development agency working through local partners to bring help and hope to communities in need around the world.

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Slum areas suffer from many environmental problems.

Asha's community health volunteers work with many community groups to bring about change. These groups include *mahila mandals* (women's associations), *mal mandals* (children's associations), and also groups of youths and men. Asha provides training to encourage members and give them confidence to lobby local politicians to provide assistance and services.

Changes across society

After identifying problem areas, local 'agents of change' work on three levels – individual, household, and community.

Targeting individuals They work to educate and motivate family members, friends, and the general slum population. They encourage people to practise good household and personal hygiene, to use latrines rather than defecating in drains or on the streets, to use safe water supplies and to clean up and dispose of waste safely. Their efforts

make a real difference. However, only so much can be achieved by individual behaviour change.

Targeting groups Asha provides training and support to encourage groups to work with local government and public health officials Their support is key to making improvements to facilities and conditions in the slums. Slum residents are taught about their rights and the responsibilities of local government to provide improvements. People are also given skills training in making presentations, negotiating, advocacy, and lobbying.

The women's groups (mahila mandals) often prove to be highly effective pressure groups in lobbying local authorities to improve public facilities. This has resulted in improved access to safe drinking water through providing taps, handpumps, tube wells, tanks and tankers. The building of community toilets has reduced defecation in the open. Lanes are

CASE STUDY Seelampur toilet complex

Seelampur shanty town is home to 25,000 people. For the past seven years the toilet facilities were neglected, dirty and infested by pests. Two years ago both the roof and the floor caved in.

Seelampur's women's group (*mahila mandal*) had been lobbying local authorities for many years to try to get new facilities. During election time in 2003 they increased their efforts. When the local councillor began her campaign, the *mahila mandal* women told her that she would not receive their support until an agreement was reached about new toilet facilities. A new toilet complex was soon promised. However, the battle did not end there. The women had to visit the councillor and slum department regularly, persistently knocking on doors until work began eight months later.

During the opening ceremony, the new councillor thanked Asha for its support. She also spoke of the persistence of the *mahila mandal* women's group in Seelampur. As a Muslim woman, the councillor praised the women for removing their veils and speaking out to provide this improvement for their families. She also promised to construct more toilets and washing rooms.

This sector of the slum now has hygienic facilities that will prevent disease and preserve the dignity of the residents. This achievement is a practical expression of women's empowerment.

KEY LEARNING POINTS

- Improving health requires improving the environment, particularly access to safe water and sanitation.
- Mobilised community groups are key to bringing about change, both in individual behaviour and in local authorities, to bring about change in facilities.
- Provide politicians and local authorities with clear ways forward.
- Housing co-operatives which give land ownership to women can transform slum areas.

now paved with bricks or concrete and have a proper drainage system. Improved and unblocked drains have reduced the amount of stagnant surface water. Due to community education, there is better use of latrines, fewer community conflicts, and commitment by the community to keep their surroundings clean.

Asha emphasises the importance of commitment and perseverance in achieving results. Staff will provide support when needed, including accompanying community members when they visit the relevant authorities. Many local politicians have come to respect, trust, and even rely on advice, from organised community groups for ways to improve the living conditions in slums. Community empowerment has greatly increased the accountability of local government and politicians. They now see it as essential when slum improvement programmes are carried out.

Targeting community action Dr Kiran Martin, the founder and director of Asha, has also established innovative slum housing projects in cooperation with the city's government. These efforts have led to the granting of land rights through a housing cooperative. Land is allocated, with housing plans prepared by local government staff. Lots are drawn for the land and people move out to another part of the slum while they build themselves new homes. They re-use building materials from their

existing homes and buy new materials by obtaining loans. New water and sewage connections, drainage systems, street lighting, pavements and community centres are built.

The housing co-operative charges residents a regular small fee to cover the costs of maintaining the area. This enables the slum to become a self-sufficient housing estate running its own affairs. These projects have completely transformed swampy, dirty, overcrowded slums. One unique and innovative feature is that land ownership is given to women living in the slums. This model has now become the basis of Delhi's slum policy. The city's government has replicated this model in many slums.

Improving the slum environment, combined with land tenure, community empowerment and health programmes, has resulted in extraordinary improvements in the living conditions and health of slum inhabitants. In the slums where Asha works, deaths among young children have been significantly reduced and diseases linked to dirty water and poor sanitation have been greatly reduced.

Dr Ambika Rajvanshi is a doctor who has worked with Asha for two and a half years.

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Good hygiene significantly improves child health.



Editorial

My first visit to a slum was in New Delhi. As I was led through the network of tiny alleyways, my first impression was one of considerable surprise at people's amazing resourcefulness. Yes, living conditions were very limited. However, people had adapted to their situation in all kinds of interesting, and usually positive, ways.

This issue builds on people's resourcefulness. Most of the articles look at major changes in the lives of slum dwellers. But this change has not always come from outside and has rarely involved outside funding. It has resulted largely from the impact of mobilised groups and communities. It has come as a result of people putting pressure on local authorities in order to receive their basic human rights in terms of access to water, shelter. sanitation and education. As some groups achieve results, so they can have a considerable impact on other new groups. The quote from a mayor in Jimma (page 5) captures the power of mobilised groups by describing them as 'a fire'.

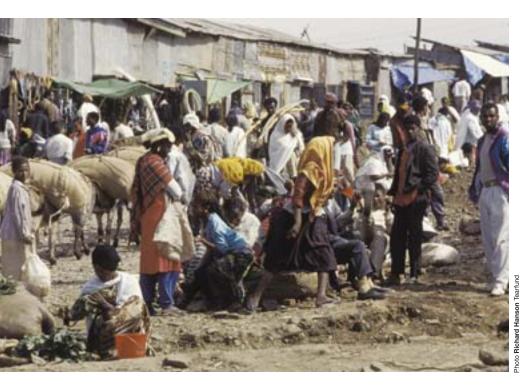
According to the UN, there are one billion urban slum dwellers today. By 2020 there are likely to be two billion people living in urban slums (two out of every seven people in the world). This rapid growth of urban slums means that most governments and NGOs are unable to respond adequately. This challenge is one that the church in particular must respond to with all the transforming power of our Christian faith.

The next issue will focus on reconciliation.

Jobel Isabel Carter Editor

Transforming lives

Mesfin Shuge leads a team of ten staff within the Kale Heywet Church (KHC) in Ethiopia. Their department is known as the Integrated Urban Development Department. Their work targets urban poor people and they work in four cities at present – Nazareth, Awassa, Addis Ababa and Jimma.



The Integrated Urban Development Department's approach was piloted in Nazareth, a city north of Addis Ababa, with many unemployed people and street children. Two social workers began work there in 2002 to improve the situation of unemployed women. They began with house-to-house visits to understand the nature and level of poverty, average family size and the number of widows. Then they used participatory exercises to raise people's awareness of the situation. These included role-plays which gathered the community together.

In the first year 34 self-help women's groups were formed. Five facilitators were selected from the groups and trained to lead discussion on important issues such as income generation, family planning, managing small businesses, household management, supporting people with HIV and AIDS, healthcare, and harmful traditional

practices. They were trained with short, half-day training inputs.

At first many women were reluctant to join. They feared they would have to join the Kale Heywet Church (KHC). However, in time they realised this was not the case. Membership of the groups is open to all, regardless of ethnic background and religion. Most women in the groups are members of the Orthodox Church or Muslims. There are now 98 self-help groups in the town with about 20 members in each group. The groups are networked into clusters. Eight cluster-level associations each work with up to 20 self-help groups.

The main aim of the work is to empower the community, targeting the poorest of the poor. Objectives include:

- improving living conditions
- providing educational opportunities, for children in particular

- building the capacity of women in decision-making
- encouraging healthy attitudes towards work
- avoiding harmful traditional practices.

Revolving loan funds

No outside funding is available, so the groups depend entirely on funding raised by the members, despite their poverty. The self-help groups encourage members to save a tiny amount of money - just 50 US cents each week. This money is used to build up a loan fund for them. Each group has its own bank account. Initially this caused problems as every group had to be registered as an organisation. To overcome this problem, the Kale Heywet Church name was used, together with the name of each small group. However, a private bank has now agreed to open hundreds of accounts for the groups. The funds keep growing from tiny regular deposits and benefit from bank interest. Each member has a passbook and careful records are kept.

The women's groups in Nazareth have saved an overall total of 280,000 *birr* (about US \$33,000) which is used to provide a revolving fund. Women are allowed to take out loans of between 30 to 3,000 *birr* on a regular basis. The repayment period is short, usually just four months, so that more women can benefit in a given time. The loan amount they can take is linked to the amount they have saved. They can usually take out between two or three times their savings. Cluster associations manage and provide the loan money.

The groups are very strict about members who miss meetings or do not pay contributions. Members are very committed about repaying their loans. They know that if they default their friends will suffer. Close social ties are also reflected in the social insurance system that groups have set up. In addition to their weekly contribution to loan funds, members in Nazareth also pay 25 US cents to a social insurance system. This is used to help any members who are sick, injured or in any other kind of trouble.

CASE STUDY

Yezeshewal fled her home because of ethnic conflict. She lost all her belongings and fled to Nazareth. She offered her son as a labourer to a family so at least he would be fed. She and her other son suffered severe hunger. She developed a serious eye problem but could not afford the doctor's fees. Then she heard about the self-help groups. She felt it was a miracle to be counted worthy to join the group. She began to save tiny amounts. Today she owns six cattle for fattening. Her eyesight has been saved and she belongs to a group that cares for her. She says, 'I am a privileged woman because my social bonds are strong and I have a place to share my feelings - including my sorrow and grief.'

Help given from the social insurance fund does not have to be repaid.

Regular evaluation

The cluster-level associations evaluate the self-help groups every six months. They use a simple scoring method where group members rank themselves out of five on their performance. They ask questions such as:

- Do members attend regularly?
- Do members save regularly?
- How are the co-operative action programmes working?
- How well is the loan provision working?

Members do not vote but agree their answers together.

Women in the Nazareth groups have found new confidence in their own abilities to improve their lives, and the lives of their families. Many have become empowered and confident community members. Various incomegenerating activities have been started, including fattening cattle, rearing sheep, making bread, spinning cotton, running small stalls and cafes.

Improved housing

From small beginnings, the groups continue to develop. Each group is encouraged to develop a five-year plan. Some groups have highlighted the need to improve housing. An ambitious plan, the 'New Holy Land', has been developed on a piece of leasefree land which KHC has been given in Nazareth. A volunteer architect has drawn up plans for 750 low-cost brick homes, with a primary and secondary school, market place, kindergarten, health centre and community meeting area. Residential blocks are planned with communal kitchens, washing areas and latrines. Each low-cost home has two rooms. Group members will pay for their new homes over five years. Donor funding is being requested for the community facilities. Money repaid for the homes would enable another building project to begin in a different area, based on a similar design.

Multiplying the work

This approach has been used in three other cities in Ethiopia – Awassa, Jimma and Addis Ababa. Newly formed self-help groups are taken to awareness-raising meetings to meet members of well-established self-help groups. This often results in astonishing and rapid transformation. When work began in Jimma, KHC met with a great response. After two days they had encouraged the formation of 25 self-help groups. However, the mayor became very worried that they

CASE STUDY

Emebet left her home area with her husband and three children due to conflict. One child died while they stayed in a refugee shelter. She and her husband worked as daily labourers in Nazareth. Later Emebet found work as a maid and joined one of the self-help groups. She discussed with her husband how to use her first loan. They decided to start making *enjera* (local bread). With her next loan she bought sheep to fatten.

Her husband saw this as a turning point in their lives. 'From kneeling before poverty, we are now able to overcome poverty,' he said. Their children can go to school and Emebet joined evening classes. 'Now I can read and am educated,' she says. 'I can talk to my husband and feel he respects me as an equal.' Emebet has real hope for the future.



Kalmalno counting Tamagne self-help group's money.

wanted to take over the leadership of the city. He came to them saying, 'Get out of my city and extinguish the fire you have lit.' Staff were threatened with prison. Since then, having seen the impact of their work elsewhere, the mayor has understood that they were not threatening his position. He has invited them back and given KHC large areas of land for their work.

Once groups are formed, care is taken to establish good links with government organisations, NGOs, cooperatives and churches. This is important to ensure sustainable and effective development. It also avoids duplication of effort and brings unity. This networking has resulted in technical support from government organisations. Other church denominations have also begun to play an active part in community development.

Mesfin Shuge leads the IUDD and is studying for a PhD in Social Development.

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The work of **Sulabh International**

The work of removing human waste (sometimes called night soil) from homes that lack adequate sanitation systems, is regarded as the lowest of all work in India. It is carried out by people called *Harijans*, belonging to the caste known as the Untouchables.

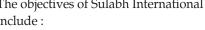
Today, there are still over 600,000 Harijans in India who collect waste from bucket toilets, carrying it on their heads and dumping it in fields and canals. This work puts their health at risk.

Bindeshwar Pathak is a social scientist who has made it his life's work to improve this situation. He discovered that most low-income urban households lacked access to sanitation and that few of India's 3,250 major towns and cities had an adequate sewage system. Today, one third of the country's population still lacks access to basic sanitation. He carried out detailed research to find the best solution.

Pour-flush latrines

In 1970 he founded the Sulabh International Social Service Organisation. The objectives of Sulabh International include:

- restoring human rights and dignity
- freeing Harijans from the unpleasant work of handling human waste
- rehabilitating *Harijans* and training them for other jobs
- equals in society
- improving health and hygiene
- educating people not to defecate in the open
- motivating people to build and use Sulabh toilets
- providing community toilets and bathing facilities in slum areas for a small fee
- around latrines



- promoting the status of *Harijans* as

- encouraging people to plant trees



- harnessing energy from human waste
- using the manure from Sulabh toilets to raise farm productivity.

Sulabh promotes a simple design for pour-flush latrines with two pits. The minimum cost is US \$50 but with local help they can be built for as little as US \$30. Regional governments will often contribute half the cost of individual latrines.

For more than 20 years, the social activist and his 50,000 volunteer field workers have led a campaign across India to persuade people to use latrines. His organisation, Sulabh International, has now built well over one million latrines in 1,080 towns across the country.

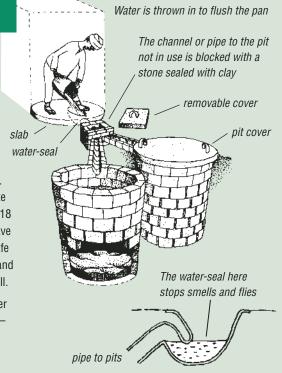
In overcrowded slums and busy areas, such as rail and bus stations, Sulabh has built over 7,500 pay-and-use community toilets, with larger pits. These are built in collaboration with local authorities who provide the land and building materials. Sulabh manages the building and maintenance. By charging one rupee (2 US cents) a visit, Sulabh can employ staff to keep them clean. Attached to many of these are public bath centres, which provide clean drinking water, showers and a place to wash clothes. These are paved and walled, decorated with potted plants or gardens and kept clean. Armed guards are also on duty.

Pour-flush latrine

The latrine slab has a water-seal unit with steep sides. This needs little water to flush and the waterseal keeps out smells.

One pit is used at a time and both pits are covered by air-tight covers. The liquid drains into the ground through holes in the pit lining. When one pit is full, pipes direct waste into the second pit. After 12 to about 18 months, the contents of the full pit have been digested into manure and are safe for handling. The pit can be emptied and then reused when the second pit is full.

The latrine's cover is made of whatever low-cost local materials are available brick, bamboo mats, grass, stones or sacks.



Sewage is collected in tanks at 160 of these centres and connected to biogas converters to produce biogas.

As a result of the work of Sulabh International about 37,000 Harijans have now found other work. Sulabh's activities include providing training and employment to children of Harijans. Institutes provide training for the children in a variety of skills to enable them to find work as, for example, electricians, carpenters, builders, administrators, tailors and mechanics.

Mr Pathak has even opened a museum of toilets in New Delhi. This records the history of sewers, drainage, disease and latrines. He hopes it will help to change attitudes towards human waste.

A recent evaluation (Beyond Boundaries, Asian Development Board) found that:

- nearly half the latrine users earned less than the minimum wage, indicating their low-income status
- over 75% of users were happy with the charges and the clean facilities
- 84% were regular daily users of the facilities.

Even among migrant and low income urban slum dwellers, there is a willingness to pay for good facilities - and other agencies are now following the example of Sulabh International.

Compiled from information from Sulabh International. Email: sulabh1@nde.vsnl.net.in Website: www.sulabhinternational.org



A Sulabh community toilet.

Letters News = Views = Information

Please write to: The Editor, Footsteps, PO Box 200, Bridgnorth, Shropshire, WV16 4WQ, UK Email: footsteps@tearfund.org

The impact of sweet foods

As a health promoter I accept the nutritional value of eating fruit and encourage this in my daily work here in the UK. However, as an oral health promoter, I also know that one idea to improve health can sometimes have a negative effect on another aspect of health.

I believe we are sitting on a timebomb of oral disease in the South. The introduction of Northern diets and lifestyles mean that tooth decay is rising rapidly in many areas as more sodas are consumed. I have spent years discouraging the use of fruit squash due to its harmful effects on teeth – from both the sugar content and the acid in the fruit.

I long to see children's health improve, but would question the use of fresh fruit squashes (Footsteps 64), especially if they are seen as 'nutritious'.

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The role of theatre in protecting the environment

We all have a duty to protect the natural environment, for our benefit and for that of future generations. Theatre is a powerful tool for sharing messages, and young people often love to take part in plays. We recommend putting on short plays in schools. I have written a short play about protecting animals in danger of extinction, called A plot against the environment, which I would be happy

for others to use. It can be adapted to local needs. Please email me (in French if possible), stating whether you want the play in English or French.

I also produce a regular electronic newsletter in French and KiSwahili for grassroots groups. Each issue looks at different aspects of the environment such as soil erosion, flooding and land clearing. Again, I would be happy to send Footsteps readers a copy.

Kitambala Kabwe Clément Email: kitambalac@yahoo.fr

The art of invention

Where do ideas come from? They are like seeds that God has spread in the air. We catch them by being open-minded and aware of our surroundings.

In order for these seeds to grow and produce fruit, they have to be fed. We must have a good imagination, like fertile soil, for them to develop. Inventors are usually quite ordinary people, with a certain talent. When we see something new, we might say 'Why didn't I think of that?' Inventors are people who see things that others have not noticed. There's nothing mysterious about them: they simply use all their senses.

Creative ideas will never be exhausted, because they change with every generation. However, God is really the only Creator of everything. As people, we simply participate humbly in God's creation.

Nzabakulikiza Emmanuel c/o La Rustica, BP 45, Ruhengeri Rwanda

Mosquito control with neem oil

Indian scientists have found that adding 1% neem oil to the kerosene used in kerosene lamps reduced the number of mosquitoes in living areas by nearly 75%. The number of cases of malaria also dropped significantly. The neem oil used was obtained from a pharmaceutical company. Locally produced oil should also work well. The scientists claim that this method of control would be cheaper than using mosquito coils.

From Indian Journal of Malariology No 33: 81-87

Biosand filters

Biosand filters purify dirty water so that it becomes safe to drink. They are very useful, both in rural and urban areas which lack safe piped water. Calgary University, Canada, developed an innovative low-cost design using concrete.

Effective prevention

In Uvira, Democratic Republic of Congo, Tearfund has introduced biosand filters in two areas of the city where water-borne diseases, such as cholera, are a serious problem. Their objective is to encourage sustainability by providing the filters for sale, after first ensuring local people are aware of the benefits of the filters so they will want to buy them. A social enterprise, BushProof, trained technicians in the production and use of the filters.





Promotion

Health centres in Uvira have been very pleased to receive sample filters. This means patients now have safe drinking water and the medical staff are able to promote the technique to patients and visitors.

This huge puppet is used to explain how the Biosand filter works!

The impact of biosand filters

These filters are really appreciated by the people in Uvira. They provide safe drinking water in a simple way. When correctly used they help to control nearly all water-borne diseases such as diarrhoea, cholera and typhoid. So far, 100 households in Uvira have bought, and are using, the filters after training.

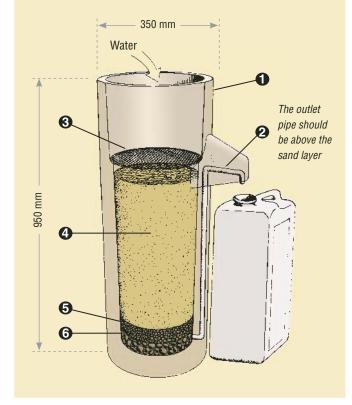
Making a biosand filter

A strong metal mould is needed to produce the filters. This requires welding skills. The moulds should last for many years and most local metal workshops can make one.

Each filter contains six items (see drawing below):

- **1** The concrete outer shell, built using $\frac{1}{2}$ sack of cement mixed with 2 sacks of gravel and $\frac{1}{2}$ sack of sand
- 2 A length of PVC pipe, 15mm diameter
- 3 A diffuser plate full of small holes, made from metal or pottery
- 4 A 40cm layer of clean, washed, medium-grade sand
- **5** A 5cm layer of small gravel
- 6 A 5cm layer of small stones or large gravel.

The cement mix is prepared and placed in the mould after putting the plastic hose into position. The mould is then closed up like a shell. After 2 days the mould is opened and the filter removed. Any holes can be filled to give a smooth surface. It is important to keep the concrete damp for 5 days so that it will not crack because of heat or dryness. The cement for one filter costs about US \$6. The filters can be sold for between US \$6 to \$12, which ensures a profit for the producers but is still affordable for most households.



CASE STUDY

The Swiss-based NGO, Medair, trained technicians to make these filters in Machakos, Kenya, in the late 1990s. They educated people about their potential. Medair worked in the area for only a year, during which 400 filters were sold. A recent evaluation showed that over 2,000 filters were sold over four years, providing health benefits while generating income! The business of producing filters proved very successful and the technicians had set up businesses in new areas to meet the demand.

Installing the filter

This is done once the filter is in a permanent place – in the cooking or living area. Place a 5cm layer of small stones or large gravel at the base, followed by a 5cm layer of small gravel. Then fill the filter up with washed sand until it is exactly 5cm below the level of the diffuser plate. Rest the diffuser plate on the small ledge. Fill the filter with water. The diffuser plate should always be left in place when pouring in water.

However, the filter is not yet ready for use. A layer of what looks like dirt must first be allowed to develop on the surface of the sand. This is sometimes known as the *schmutzdecke* (which is a German word for *dirty layer!*). This layer is the most important part of the filter. It acts as a fine filter and actually 'eats up' some of the disease-causing microbes in the water. Lower levels in the sand continue this process.

Water must be poured into the filter every day. It takes two to three weeks for the *schmutzdecke* to develop fully. During this time the water is much improved, but not yet fully safe to drink. People should be encouraged to wait for three weeks before using the water directly for drinking.

Maintaining the filter

Users must be given clear information about how to use and maintain the filters. Maintenance is very simple and free. There are just a few important points that people need to remember:

- If water is not poured into the filter every day the *schmutzdecke* can become less effective.
- Children and animals must not be allowed to touch the spout so that it remains clean.
- The filter must not be knocked or moved.
- The diffuser plate must always be in place when water is poured in to prevent damage to the *schmutzdecke*.
- Over time, the schmutzdecke may become very thick so that water takes a very long time to pass through the filter. If this happens there are two options:
 GENTLE STIRRING Block the spout and fill the filter with water. Stir the water very gently and slowly with a clean hand. Don't swirl too fast or the sand layers will be disturbed. Scoop the muddy water out with a cup, taking care not to touch the sand. You can repeat this a few times until the water is no longer very dirty during swirling. Unblock the spout and allow the water to

THOROUGH CLEANING Remove carefully the top 2–5cm of sand, wash it and replace it. Unless gentle stirring fails to restore a good flow rate, this method is not really recommended because it disturbs the *schmutzdecke*. It is therefore really important to wait three weeks before using the water again to ensure it is safe to drink.

pass through the filter as normal. It will be safe to drink almost immediately.

Cleaning should be done only if the rate of water flow becomes too slow. Careful monitoring is recommended to ensure people are confident about how to do this. During the three weeks of waiting needed after thorough cleaning, other low-cost methods of making water safe for drinking can be used, such as boiling, SODIS (see *Footsteps 51* and www.sodis.org) or using water from a neighbour's filter.

Using the filter at home

After three weeks, filtered water will be safe to drink – tests show that around 99% of microbes and contaminants are removed. Water is simply poured in and collected from the spout in clean containers. The filter holds 20 litres of water. After filling the filter, water will need to be collected in a clean jerrycan. Normally one litre of water is filtered every minute, so it will take 20 minutes for the contents of a 20 litre bucket to pass through the filter. The filter can be used as often as needed.



Water is poured slowly into the filter and safe filtered water is collected from the spout.

CONTACT INFORMATION

www.biosandfilter.org is a very useful website which contains detailed technical information on how to build the metal mould and how to produce the filters.

BushProof is an organisation that provides training in the production of the filters.

Website: www.bushproof.com

Compiled with information from Nathalie Vezier, Disaster Management Team, South Kivu (Email: south-kivu@tearfund.org) and Adriaan Mol (Email: info@biosandfilter.org)

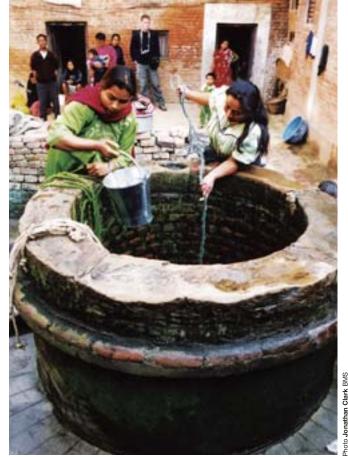
Photos: BushProof Illustration: Rod Mill

Sustainable urban health services

Transferring responsibilities to local government

by Martin Allaby and Christine Preston

The Yala Urban Health Programme (YUHP) was originally set up by the United Mission to Nepal to respond to urban health problems in the city of Patan, Nepal. However, in 1998 the key priority became the gradual transfer of responsibility for this successful healthcare programme to full government control. This article looks at the process of transferring responsibility and highlights the success factors.



Treating wells with chlorine greatly reduces the risk of water-borne diseases.

In 1984, YUHP staff conducted a baseline survey of the city. They found there was little awareness of health and environmental issues in the city. The streets were dark and unpaved, and blocked by solid waste. Public wells were a main source of drinking water, but were often in bad condition and filled with contaminated water. Diarrhoeal diseases were very common. School attendance was low and literacy rates, especially among girls and women, were very low. Immunisation coverage and uptake of family planning was also low.

The government health system in Nepal provides basic health services for rural citizens, but not for urban populations. In the cities, public health is officially the responsibility of the city government. At that time there was just one government clinic and a district hospital in Patan. YUHP's first priority was to fill the gap in essential services in the areas of the city where it worked. To improve health in Patan, YUHP began several initiatives:

Raising awareness Urban health staff raised awareness of sanitation, hygiene, health and environmental issues. Nurses went to public meeting places with a vaccination box as a first step towards

improving mother and child healthcare. Mother and child health clinics were gradually introduced.

Improving wells After an outbreak of typhoid in the city in 1992, a programme of well-improvement began. Communities formed well-user committees to take responsibility for local fundraising and to recruit volunteers to maintain the well. Wells were rebuilt or repaired and the well water was treated with chlorine.

Women's education A non-formal education programme began, which targeted women and factory workers.

Improved sanitation Improvements were made for many households with piped water and latrines with the support of the German agency, GTZ. By 2000, in six of the 22 city wards, all households had access to latrines and nearly 80% had access to piped water.

During recent interviews, women who were young mothers in Patan 20 years ago noted that women today have smaller families and that children no longer die from diarrhoea or typhoid.

New direction

From 1995, with the appointment of a new manager to YUHP, the focus changed to ensuring that a sustainable primary healthcare system could be developed within local government by 2006. A formal partnership was agreed with the local government in 1998. The key factors in planning for successful handover were:

- **Credibility** Over 15 years YUHP had gained the trust of both the community and of local government.
- Evaluation To ensure an effective strategy for handover, YUHP looked at the strengths, weaknesses, opportunities and threats in their work. It took into account the activities and capacity of other organisations and local authorities. Following this evaluation, YUHP focused on community mobilisation and basic healthcare.



Health camps enable patients to be examined and receive treatment for health problems.

RESOLVING PROBLEMS hygiene

YUHP has encountered several problems in handing over responsibility for community health. These include:

Dependency To tackle this, YUHP has encouraged more people to volunteer as health promoters, encouraged more initiatives from the health committees, and provided opportunities for developing capacity.

Ethnic tensions Many Nepalis have a strong sense of caste and ethnic identity. Migrants from rural areas may belong to different castes, speak different languages and dress differently. This can mean they are not easily accepted into the local community. In some areas, the health committee and clinic were led by different caste groups that were unwilling to work together. YUHP introduced several practical ideas to tackle these tensions:

- All YUHP staff and volunteers wear the same uniform.
- 10% of the volunteer health promoters must be from low-caste or migrant communities.
- Volunteers and staff from different castes and professional groups must eat together at training events. This has resulted in friendships that cross social barriers.
- Extended coverage In 1995 YUHP were working in just eight of the city's 22 wards. They agreed to extend their work to include any of the other wards that wished to develop local health activities.
- Healthy Cities workshop This was organised in 1998 by YUHP for key government and community leaders to share the vision for strengthening Patan as a healthy city. It was a key event in building local commitment. After the workshop, the mayor signed the first partnership agreement with YUHP.

Building on the partnership agreement

From 1998 onwards, the focus of YUHP changed. They planned an eight-year handover process, to ensure there was enough time to develop local capacity. The agreement of senior government leaders was essential. However, YUHP recognised that developing the capacity of senior government staff was unlikely



Health committees organise one-day demonstrations.

to be enough. A great deal of effort was therefore given to working at community level.

Building capacity at higher levels

A public health unit was established to manage nursing staff, co-ordinate health committees and ensure participation in national health campaigns. YUHP helped by providing a Nepali consultant and by sponsoring key staff to attend training.

Building capacity at middle level

Local health committees were established in each ward of the city. These were made up of teachers, traditional birth attendants and representatives of community groups. The initial priority of most committees was to open a clinic. During their first 12 months, the committees were supported by YUHP and local government who both sent a representative to attend each meeting. The committees chose volunteer health promoters from their members. The promoters were trained by YUHP to carry out an initial survey of all households in their area. This assessed people's work, literacy levels, water and sanitation practices and their uptake of health services. YUHP staff helped the volunteers to analyse the results and to present the findings to the committee.

Based on the survey findings, the committees produce action plans to begin meeting local health needs. For example, they organise one-day health demonstrations. They provide posters

with information about common health problems and display them in public places. People can have their height, weight and blood pressure checked. Nutritious foods are put on display. They also organise one-day health camps, where doctors are asked to donate their services for a day, to examine patients, provide minor treatments and arrange referral for complex problems. The most popular camps are for eye, dental and maternal health problems.

Building capacity at community

level Over 400 volunteers have been trained in hygiene, nutrition, family planning, immunisation, women's rights, tuberculosis, HIV and AIDS and other health issues. Their aim is to raise awareness about health in Patan. Each volunteer makes contact with about 50 households every two months. They also help with health demonstrations and health campaigns.

Conclusion

YUHP still plans to complete the handover in 2006. At every stage in the handover of responsibility, donors and evaluators have been sceptical that this would work. However, local government now manages the team of nine nurses and community health workers, and provides almost 80% of their salaries. This article shares some of the factors that have led to success but perhaps the most important has been that leaders in both YUHP and local government have been willing to take risks. An attitude of service that values the work of others has helped to build success.

Martin Allaby is a consultant in public health with Interserve. Christine Preston is programme unit director of the Yala Urban Health Programme.

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Community involvement in urban water supply

by Richard Franceys



People living in slums often have to buy water from private vendors.

Millennium Development Goal 7, target 10, seeks to halve the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. Community-driven initiatives could make an important contribution towards achieving this goal in urban areas.

A large and increasing proportion of the people without adequate water supplies live in urban areas. In most slums, water supplies are either inadequate or non-existent.

Involving communities in water supply in rural areas can improve the design of schemes and support long-term sustainability. How can communities in urban areas be involved in supporting water supply, particularly when urban water supplies often need professional engineers to manage complicated and expensive technology?

In many urban areas, companies who manage water supplies don't appear to be doing very well, usually only managing to supply richer people with piped water. Slum dwellers often have to buy very expensive water from small-scale private providers, tanker drivers and vendors because there is no piped network.

The involvement of private companies in improving urban water supplies has had mixed successes and is not likely to be expanded in the future. However, one of the effects of involving private companies has been the realisation that public services, such as water, need an additional level of control by government and society, especially when there is no competition.

Water supply in urban areas requires considerable investment on very expensive buried pipes and concrete tanks. It is important to judge whether money is being spent wisely. Water prices are increasing world-wide as people expect higher standards. However, it is important to ensure higher prices are not just paying for inefficiencies, such as overstaffing, in the companies. Piped water supplies must also ensure fair access to the poorest people.

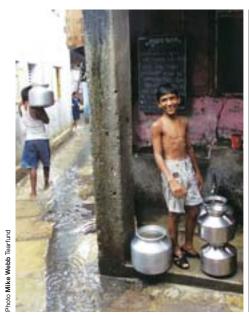
Over time, all organisations can become lazy and tend to do more to meet the needs of their staff than their customers. This has been true for both public and private water suppliers. There is a need for an independent economic regulator to judge performance against prices to ensure that water supplies (including the disposal of waste water) are well managed and that charges are fair.

Customer committees

In a big city 'the whole community' cannot become involved in the same way as in a village where nearly everybody can discuss the right place for a new handpump or well. A useful model is for the economic regulator to set up a 'customer committee' to represent the voice of customers. Where that proves too difficult, a local NGO could represent the concerns of ordinary people. Examples of such voluntary groups of water customers are Water Watch in Zambia, Customer Service Committees in Ghana and the Customer Forum in Jakarta, Indonesia.

The customer committees can question the water provider on its performance. This can mean visiting poorer neighbourhoods to talk with people

Customer committees
can be set up to
represent the voice
of customers





In most slums, public water supplies are inadequate or non-existent.

about how often they receive piped water, for how many hours per day and how much they have to pay for it. The customer groups may be asked by government to become involved in setting fair charges. They should make sure that the water provider is putting any problems right and doing it in a fair way. In some countries they become involved in ensuring water companies pay the proper compensation to customers when they make mistakes.

In Lusaka, Zambia, the committees have been going out to the poorer areas

of the city to explain to customers their rights and responsibilities. They have been so successful and so well received that the energy and telecommunication regulators have now asked them to include additional members and take on responsibility for considering their performance as well.

The poorest customers are unlikely to become part of such committees. They simply don't have time in their struggle for everyday survival. However, the customer committees can arrange for regular surveys to find out what customers think of their water service.

They can hold 'focus groups' for people to meet and share their experiences of receiving water, problems over paying bills, getting new connections or being reconnected after a period of being unable to pay their bills.

Where government or the regulator has not arranged for these formal committees to be established, NGOs have often been asked to represent customers. This has worked well in La Paz, Bolivia, where the *fejuves* (local neighbourhood associations) represented householders to the water companies and sorted out many problems, such as delays in new water connections. Similarly, NGOs in Buenos Aires, Argentina, were unhappy about the performance of the private operator there and lobbied against price increases.

All cities and towns need groups of concerned consumers who are willing to become involved in improving water supplies. Do you know of groups or NGOs who are lobbying government to establish a customer committee to oversee your water supply? Is it something you could become involved with?

Richard Franceys, a long-term contributor to Footsteps, is completing a research project for the UK Government entitled Regulating Public and Private Partnerships for the Poor.

Further information can be found at www.silsoe.cranfield.ac.uk/iwe/projects/regulation/

Lusaka Water Watch Group, Zambia

The economic regulator for water in Zambia, NWASCO, set up the Lusaka Water Watch Group (LWWG) in March 2002. Membership is voluntary and usually advertised in the national press. Selected members need to have a good understanding of water supplies and are required to serve for two years.

Members meet every fortnight and are provided with initial training, stationery, transport and other help to carry out their activities. Their main role is to handle complaints, to collect information on quality of service, to educate consumers on the proper use of water and on the role and function of NWASCO. They hold regular public meetings and pass their findings to NWASCO.

Boxes were placed in post offices for people to make complaints. However, these were not very popular, so people can now also make complaints by letter, phone and through public meetings.

The committee has proved very effective in giving consumers a voice. Through their work, many complaints have been solved. However, members have found the work time-consuming and difficult to sustain, without any financial allowances.

Sam Kayaga, 2004, Research Findings of the Zambia Case Study Regulating Public and Private Partnerships for the Poor

Resources Books - Newsletters - Training materials

website

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HESPERIAN PUBLICATIONS

Water for Life -**Community water security**

This booklet helps communities to draw on their own knowledge and resources to protect and improve existing water sources, and to develop new sources when needed. It includes information about safe water transport and storage, and practical methods to make water safe for drinking and cooking.

Water for Life

Available in English, French and Spanish. Printed copies cost US \$4 each. They are also available for free download at: www.hesperian.org

second half includes instructions on how to do dental examinations, diagnose common dental problems, make and use dental equipment, use local anaesthetics, place fillings and remove teeth.

The book is available in English or Spanish for US \$12 each plus shipping, and can be ordered by contacting bookorders@hesperian.org or online at www.hesperian.org. Both books are also available online.

Sanitation and Cleanliness for a **Healthy Environment**

This booklet offers basic information and learning activities to help communities understand and prevent sanitationrelated health problems. Communities are offered a choice of affordable, safe, and environmentally sound sanitation alternatives.

Available in English, Spanish and French. Printed copies cost US \$4 each.

Email: bookorders@hesperian.org

They are also available for free download at www.hesperian.org

Urban Health and Development

by Beverley Booth, Kiran Martin and Ted Lankester

This is a practical manual for use in developing countries, covering all kinds of issues which affect urban health. It is full of useful information for improving the quality of life for poor people in urban areas.

This book costs £7 (US \$12.50, €10), including postage, and is available from TALC.

Nutrition – a new, free newsletter

Nutrition is a new publication for nutrition practitioners. It provides an opportunity for those working in the field to share their valuable practical experiences. It updates nutrition practitioners on policy, research and technical issues.

To receive a free copy of Nutrition, or to submit an article, email: editors@nutritioninternational.org.uk

The Editors PO Box 42284 London E7 OYY

or write to:

UK



Where There Is No Dentist

by Murray Dickson

Community health workers, educators and individuals from around the world have used Where There Is No Dentist to help people care for their teeth and gums. The first half of the book contains ideas about prevention and community education. The

TEARFUND PUBLICATIONS

Organisational governance

This book aims to help board members and those managing Christian development organisations to consider their different roles, and how they can work together to fulfil the organisation's mission. It looks at



key governance principles and issues so that organisations can improve their governance structure or set up a governing body if they do not already have one. There is guidance about recruiting and welcoming new board members.

This is available as a free download in all four languages at: www.tearfund.org/tilz.

Printed copies cost £10 (US \$18, €14.50), including postage, from:

Tearfund Resources Development PO Box 200 Bridanorth Shropshire WV16 4WQ UK

Email: roots@tearfund.org

Footsteps CD Rom

The two previous Footsteps CD Roms have proved very popular. A new version is now available. This contains the content of all previous 65 issues of Footsteps in



English, French, Spanish and Portuguese. It uses html format which means that it

is easy to search for any topic. Individual articles can be printed for use in training or translating. Worries over missing back copies can now be put aside! The CD Rom costs £15 (US \$27, €22) including airmail postage. Address as left.

Why advocate for water, sanitation and hygiene?

This is a short guide aimed at communitybased and non-governmental organisations. It is written for organisations involved in delivering water and sanitation to poor communities. It aims to inspire them to address the underlying causes of lack of access to these services.

Please email:

ppadministrator@tearfund.org to request either a printed or electronic copy.

STRATEGIES FOR HOPE **PUBLICATIONS**

HIV and AIDS materials for church leaders

Strategies for Hope Trust has launched Called to Care - a toolkit of HIV and AIDS information and training materials designed for church leaders, especially in sub-Saharan Africa. The toolkit consists of a series of practical booklets and short manuals. The first two titles in the Called to Care toolkit are now available:

Positive voices

Religious leaders living with or personally affected by HIV and AIDS

This booklet contains personal testimonies from religious leaders (Christian and Muslim). It is written for church leaders to enable free and open discussion about HIV and AIDS and related issues.



Making it happen

A guide to help your congregation do HIV and AIDS work

This booklet contains practical information designed to guide and support congregations in developing and carrying out activities to address issues surrounding HIV and AIDS. It includes sections on planning, the project cycle, conducting assessments, decision making and project sustainability.

The books cost £2.40 each, plus packing and postage, from:

TALC PO Box 49, St Albans, AL1 5TX UK

Email: info@talcuk.org Website: www.talcuk.org

They are also available for free download at:

www.stratshope.org

Some free printed copies are available Please write, explaining how you plan to use these materials, to:

Strategies for Hope 93 Divinity Road, Oxford, OX4 1LN

Email: sfh@stratshope.org

UK

Bible Beautiful feet? Study Read Isaiah 52:7

This passage from the prophet Isaiah is also quoted by the apostle Paul (Romans 10:15).

- Let's have a look at our feet. Do any of us have 'beautiful feet'?
- The chances are that most of us have feet that are anything but beautiful. Well-worn, scarred, maybe dusty or dirty. What kind of news are we bringing to our community?

Here where I work in Kong Toey slum, Bangkok, most people have ugly feet. Wearing flip-flops on hot concrete makes even the softest feet tough and worn. Such feet are often an indication of poverty here. People may put on a clean shirt but their worn feet tell others where they are from.



What a contrast to the feet of well-paid workers. They probably wear socks every day and use transport! Some even get professionals to massage, trim and make their feet smell sweet! However, I don't think Jesus had beautiful, sweet-smelling feet. He walked those dusty, dirty first-century Palestinian roads on his travels. His rough feet were finally scarred with a nail hammered through them. His feet took him to difficult places, where he showed a new way to live. We can only share the good news of the Gospel by living it and making it real for the poor.

The Greek word for beautiful is *horaios*. This is actually closer to our word 'timely'. The verse is more about feet bringing timely news, which has an eternal beauty.

In a world with one billion urban slum-dwellers, what should our feet look like? Feet that become ugly for the sake of the poor, helping to fight poverty and hardship, have real beauty that counts for eternity. Much that is considered beautiful now is an ugly waste of time in eternity. By 2025 there will be two billion urban slum dwellers, so we could do with many more ugly but 'beautiful' feet!

- How much do I identify directly with poor people in my life?
- How do I bring peace and hope to those who are suffering now?
- What more could I do to make sure I have 'beautiful', if ugly, feet?

The author. Ashlev Barker, works for Urban Neighbours Of Hope in Kloeng Toey Community Centre, Bangkok.

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He has recently published a book on his personal reflections, Make poverty personal.

Defending children's rights



Some of AGAPE's promoters.

Ruth Alvarado, Director of AGAPE, describes how the focus of its work has changed.

Tearfund partner AGAPE originally worked with children who were abused, providing a safe house in Lima. Over several years, staff realised that many of the children came from the same part of Lima – the slum area known as Huaycán – which has a high rate of sexual abuse and mistreatment. This area is the main route for migrants coming in from the east of Lima and is a place where the former guerrilla movement, the Shining Path, was very active.

AGAPE now has a base in Huaycán, where it tries to prevent the situations that lead to abuse. Children can be abused in different ways. They may be physically, emotionally or sexually abused.

AGAPE works closely with the municipal offices and legal system.

Legal claims for family issues involving children are free and the government provides psychiatrists and lawyers. However, because of the great demand, not all cases can be helped. AGAPE's work and its willingness to collaborate is appreciated by government staff. However, in raising awareness and preventing the abuse of children, its work goes far beyond the capacity of government staff.

AGAPE provides a safe house, so that children who are at risk can be removed from their families until it is safe for them to return home. Staff hope to return children to their homes within one year and so far have an 80% success rate in resolving problems in the children's own homes. If children are unable to return home they are placed with other families for adoption. All courts in Lima have been told of this safe house so they can refer cases to AGAPE.

AGAPE works in local schools, providing regular training for teachers

and holding meetings with parents. Teachers are now aware of the signs of abuse and can refer children they believe are at risk. Children are also taught how to defend themselves from abuse.

AGAPE also provides training to raise awareness in churches. AGAPE has wonderfully committed and caring staff. Their work is extended by a large team of voluntary promoters, most of them church members, trained by AGAPE staff. They select and train three kinds of promoters:

Family promoters These provide practical and emotional support for families with difficulties. They often work within the churches and follow up cases of abuse.

Legal promoters Their work is to support women and children in claiming their legal rights. They help single mothers to protect their rights and claim support from fathers through the courts. Elizabeth Soriano became a promoter after AGAPE staff visited her church. She visits mothers in their homes so she is aware of their situations. She helped two of them visit their homes in the jungle area to find birth certificates for their children so they could claim their legal rights.

Child promoters These are selected from children who attend children's clubs run by AGAPE. Clubs are held on Saturdays during school terms and on Wednesdays and Fridays during school holidays. The children play games and gain understanding of the meaning of abuse, often through role-plays. They learn how to defend themselves and about the rights they have as children. Aratatipe is 11 and has been a child promoter for two years. She talks to children in the clubs and at school, especially those she is concerned about. They find it easier to come and talk to her before approaching an adult for more help.

Ruth Alvarado is Director of AGAPE, Huaycán, Peru. Its email address is: ministerioagape@speedy.com.pe

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