

# Training female sanitation volunteers

by Joy Morgan

**The recruitment and training of female sanitation volunteers for each tapstand in a village in Nepal has been a great success.**

'I DON'T WANT women's involvement in water and sanitation projects just because I like them, but because otherwise the projects don't work.' This quote from Mr Saul Arlosoroff of UNDP/World Bank appeared in the IRC newsletter recently, illustrating the change of thinking towards full community participation in the water supply and sanitation sector.

Nepal, the Himalayan Kingdom; however romantic that may sound in a brochure, tourists soon find that walking up and down steep mountainsides with a heavy load is hard work, particularly when debilitated by those stomach upsets referred to as the 'Kathmandu Quickstep'. Diseases relating to poor sanitation do not restrict themselves to tourists: they affect the health and nutritional status of the whole community in Nepal, and make up a high proportion of the 100 to 150 infant deaths per 1000 live births.

The most important water and sanitation-related diseases are diarrhoeal diseases, parasitic worm infestations, and infections of the skin, scalp, and eye. The factors contributing to these diseases and their effect on child health are many, but the most significant are the availability and quality of water, practices of personal and home hygiene, and the disposal of human excreta and refuse.

The traditional culture has its own perceptions of the cause and prevention of disease, some of which do not always correspond to modern scientific concepts. Thus, despite a high mortality and morbidity rate for the whole population, there is often little motivation to change hygiene practices.

## Introduction to sanitation

In order to improve the availability of water, many improved drinking-water supplies have been provided over the last twenty years by UNICEF in co-operation with the Nepali Government. This intervention alone did not bring about any significant health improvements among the beneficiaries. The combination of water-supply construction along with a strong sanitation education component was then considered to be essential.

The promotion of sanitation through the (almost exclusively) male water supply technicians was introduced in 1981. This also met with limited success, not surprising in a shy, tradition-bound culture where men would have limited access to women in an educative capacity. Women, however, are the main beneficiaries of water supply and sanitation programmes, being the water carriers, the caretakers of the family health, and the teachers of hygiene practices.

A more effective way to reach women is through other women who are trained specifically for sanitation promotion and improving water-system maintenance. Five pilot studies have been initiated in different districts of Nepal since 1985. This article summarizes the experience of the team currently working in the villages of Samalbung and Phikal, Ilam District, East Nepal.

The Ilam team, comprising two pairs of female sanitation fieldworkers with myself as their co-ordinator, started work in 1989. Each pair of women

workers live and work in an area where gravity-fed water-supply systems are being constructed. (Usually, 20 public tapstands can be covered in one year.)

The work begins with a general introduction to the community, first to the politically important members, who together organize the screening of a film called 'Water Means Life'. Transportation of the generator and projector to a rural area for a film show is hard work, but well worth it, as many of the villagers may never have seen moving pictures before, and a huge crowd of men, women, and children is guaranteed.

Despite the English narrative and the African people shown in the film, after the second showing the audience is usually quiet enough to listen to the staff talk over the narrative in the local language. After the show, the entire village talks about the film, if not the water and sanitation messages. On this wave of enthusiasm the staff undertake a survey of the community habits of water usage and sanitation within the project area, visiting each household to introduce themselves and to determine the Dynamic Household Score Index (DHSI) (see Figure 1).

The next stage of the project involves the choice of representatives or 'Sanitation Volunteers' for each of the



*Teaching methods involving non-directive questioning with the help of posters have been successful.*



*Acting out a play about the benefits of immunization: the message should be short and to the point.*

tapstands. Meetings are held with the tapstand users at the public tapstand sites, and villagers are asked to choose someone to attend a training on sanitation. Often the men will elect the most politically important male in the user group, but with sensitive questioning about who will use the tapstand and who is responsible for family health and hygiene, the choice of representative is usually narrowed down to the married female population.

### **Training the volunteers**

After selection the volunteers are invited to attend a meeting where they appoint at least two of their members to participate in the water users' construction committee, where the baseline situation and the volunteers' views and needs on sanitation issues are discussed. A five-day sanitation training is then scheduled, and all volunteers are expected to attend. As each representative is a volunteer, it is carefully explained that attendance is not rewarded with money, unlike the majority of other training programmes in Nepal. To show that the women's time is important, however, a small sanitation kit is awarded at the end of the training. This consists of a tea glass for measuring oral rehydration solution, a pair of nail clippers, a comb, a toothbrush, and a bar of soap.

The training must maintain the interest of the participants while communicating the messages about sanitation, or else continued attendance is poor. Subjects which are usually covered include a basic explanation about

faecal-oral routes and the prevention of related diseases by effective hand washing; safe excreta disposal; the covering of cooked food; the safe handling and storage of water; latrine construction with locally available materials; looking after the water source, the caretaking of tapstands; and oral rehydration. Sometimes information on immunization, smokeless stove building, and kitchen gardening are required and included.

Teaching methods which have already been used successfully in Nepal

have been incorporated. Printed or homemade posters are often used, as are non-directive questioning techniques which involve the participants and lead them into forming the new opinions required.

If we were to just show posters for five days interest would soon wane, so a variety of techniques is required. We incorporate short walks taking in related things in the area, small role plays, demonstrations, parodying of popular songs to incorporate sanitation messages, street theatre, and puppet shows. Messages should remain short and to the point. Each communication technique has its own advantages and disadvantages.

Participants can be asked to join the staff during street theatre to help an invalid off the stage or to clean up a dirty tapstand, while puppets can do culturally insensitive things such as a husband showing his wife affection when she recovers from amoebic dysentery or a wife hitting her lazy husband. The reactions to puppet shows have been particularly outstanding. Adults and children alike stand fully absorbed, and they remember key phrases for a long time afterwards. But if we were to just do a series of puppet shows, interest would decline.

After the training, volunteers are expected to share their new-found knowledge with their fellow tapstand users. This is done informally in their homes, with the help of the sanitation fieldworkers. The volunteers are also expected to help the fieldworker to motivate the whole community to



*Puppets, like these two discussing the new water system, can do and say things that humans would not be allowed to.*

participate in the construction of the water supply system, to build latrines, and to incorporate improved sanitary practices into their daily lives.

### Assessing progress

The monitoring and evaluation of sanitary practices needs careful consideration. We could see improvements in the community's habits, but these were not highlighted in the usual statistics of the number of latrines constructed. We needed real figures with which to measure the effect of the programme. This led to the development of the DHSI.

During the household visits the sanitation fieldworkers observe specific indicators of sanitary habits (see Figure 1). Positive responses to each of the observations are rewarded by one point. The points are totalled to give a household score. Scores in each area should improve over the duration of the programme. Where scores do not improve, new motivation or teaching techniques need to be developed. Using this technique, both staff and volunteers can be instilled with a sense of responsibility for improvement. Providing information is shared, the whole community can become involved. Prizes can be awarded at the end of the project for the household showing the greatest score, the greatest improvement on score, and the volunteer who has effected the most improvement.

Median scores at pre-project sites are generally 0, with a maximum of 2 or 3. After the projects are completed, the median score is 8, with a maximum of 12 or 13 points. Last year's project site was Pyang village, where 78 per cent of households were constructing, using, and maintaining simple pit latrines, up from 0 per cent at the beginning of the project. Cleaning and covering water storage containers improved from 25 to 61 per cent, and knowledge of preparing ORT improved from 15 to 72 per cent.

The presence of faecal coliforms (fc) in drinking-water indicates contamination and implies the potential presence of pathogens. WHO, in their guidelines for unpiped water supplies, recommend that 'The objective is to ensure the absence of faecal coliform organisms from drinking-water'. Feacham *et al.* consider this to be unrealistic and set their recommendations at less than 10fc/100ml. It has commonly been reported that initial counts of 0-10fc/100ml at tapstands are converted to 10-500fc/100ml in households through careless handling and storage. Studies in rural Nepal, where tradition requires that the inside of water containers be

**Figure 1. Dynamic Household Score Index.**

Project name . . . . . Name of householder . . . . .

Date . . . . . Family size . . . . .

Award positive observations or responses with one point.

1. Do members of the household use one area for defaecation?
2. Is this a sanitary latrine (one where flies are denied access to excreta)?
3. Is the latrine slab clean and dry?
4. Is there anal cleansing material available in the latrine?
5. Do household members say that they wash their hands with soap or ash after defaecation?
6. Do the insides of water containers look clean?
7. Are water storage containers kept covered?
8. Is cooked food kept covered and thoroughly re-heated before consumption?
9. Is domestic rubbish disposed of in a compost pit?
10. Is the tapstand in perfect working order?
11. Are the tapstand surroundings clean and tidy?
12. Is wastewater re-used for irrigation?
13. Can a member of the household recite the correct recipe for oral rehydration solution?
14. Can a member of the household name the correct day in the month when immunizations are given at the health post (or more locally)?
15. Do each of the children in the household have a current immunization record card?
16. Has the household shown interest in sanitation by other initiatives? i.e. a table for drying plates, clothes line in the sun, shower room, smokeless stove

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Total the points to give the DHSI

rinsed with potentially dirty hands and possibly contaminated soil confirm this trend.

Water testing was carried out in the field at Phikal by ENPHO (a natural resources investigation group) in advance of the water supply and sanitation education programme. Household-ers were questioned about their water handling and storage habits as water from their sources and drinking-water containers were analysed. Sources with faecal coliform levels ranging from 0fc/100ml (protected spring) to 2400fc/100ml (unprotected spring) produced household drinking-water counts of 0fc/100ml to 3500fc/100ml. The highest degree of contamination was found at the house of Mrs Durga Kumari Baral. As her drinking-water was tested she said: 'I never clean my storage container with soap because it smells. I always use mud.' The water tester told her that mud can be contaminated, but that wood-ash, being sterile and even biocidal, was a better cleansing material. When the test results showed that this household was consuming water containing 600fc/100ml from a source containing

only 2fc/100ml, the household was re-sampled. This time she said: 'I never use soap or mud, I always clean the container with ash' — the subsequent score was 28fc/100ml.

The survey will be repeated next year after the project has been completed. It is hoped that greater improvements will be observed and quantified.

One of the most rewarding experiences must be visiting old sites to find that improved sanitary habits continue to be incorporated by the whole community. Mrs Sancha Maya Thebe of Pyang commented 'My sons built this latrine for their children and now I find that I prefer to use the latrine than find an undisturbed spot in cardamon fields.'

The Nepali Government are preparing to evaluate the success of these women's involvement approaches. The results of their evaluation will be used to determine the future sanitation programme in Nepal. ●

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