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Drinking-water and sanitation: women can do much

In many societies, traditional roles are such that women are well placed to contribute significantly to the success of water supply and sanitation projects. Women can help to ensure that installations function reliably and are adequately used, and that their potential impact on public health and socioeconomic development is realized. National and local planning processes should facilitate and support women's participation.

In villages in the Indian state of Haryana a young bride who enters the house of her husband's family for the first time is greeted at the door by her mother-in-law who places a pot of water on her head as a symbol of married life (1). The collection of the family's water is the most visible but not the only role of women in domestic water supply and sanitation. The daily life of women involves a combination of many different roles: mother, wife, daughter, domestic manager, contributor to family income, kinswoman, member of women's groups, community member, and individual (2). These roles have a direct bearing on the success of water supply and sanitation projects.

Domestic and public management

As domestic managers, women decide where to collect water for a particular purpose in

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the dry and wet seasons, how much to obtain, how to store, use and re-use it, and what to do with waste water.

The selection of domestic water sources by women is a rational process in which they may weigh a great number of criteria, including time, effort, price, taste, other uses of the sources, and problems of sharing. Women do not automatically make use of new facilities, but first compare them with those they are already using. The decisions made are very important because the impact of a project on public health depends on the number of households using sufficient safe water for hygiene and drinking, and for washing and bathing in areas with schistosomiasis, and also using safe excreta disposal methods. The mere provision of health information is unlikely to change behaviour patterns based on what is often a complex set of socioeconomic and cultural factors. More can be expected from the adaptation of local designs to the needs and practices of women, together with the involvement of women as planners and educators (3).

The contribution of women to the management of domestic resources also affects the financial viability and socioeconomic benefits of projects. In many parts of south-east Asia, Central America. and South America it is the women who manage daily household expenditure, on a very limited budget (4). Income generated or controlled by women is spent first on basic domestic needs, which may include extra vessels for separate storage of drinkingwater, kitchen improvements allowing better household and food hygiene, and the payment of water rates. Women in villages in north-east Thailand used water from a piped drinking-water supply for vegetable gardens and small livestock, and spent the time saved in water collection on weaving. The extra income they made was used partly to finance the connection of their houses to the piped water supply (5).

As kinswomen and members of women's networks and groups, women guide the informal learning processes among women. Despite gaps and conflicting beliefs, women have acquired basic insights in environmental health through observation, experience and communication. Their traditional roles in health care and detailed knowledge of local behaviour patterns and the underlying social, cultural and practical reasons for them are of great value in the planning and implementation of local improvements in hygiene. Such activities are often necessary to supplement the introduction of improved water supply and sanitation facilities. Women also know which of their opinion leaders in health can best be trained as community health motivators.

Recent anthropological studies have revealed that the involvement of women in the maintenance and management of community water supplies is not new. Wells in a rural community in Sri Lanka, for example, are regularly emptied, cleaned and repaired by women and children (6). However, the informal character of such arrangements and the tendency of both the women and the local leaders to ascribe all activities to the male leadership have kept these patterns hidden. The role of women only comes to light when attention is given to how the work is carried out, rather than to who is in charge.

Women's experience in water supply and sanitation enables them to participate in decision-making on technology, the selection of community workers, the design and siting of facilities, maintenance, and other matters affecting the success of a project.

Case studies show that the benefits derived from women's involvement include the identification of reliable water sources, the

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use of appropriate designs, reduced construction costs, and the avoidance of risks, especially to small children. Women's participation is an acknowledgement of the roles women have always held but which may be forgotten when water supply and sanitation enter the more formal decision-making sphere traditionally dominated by men.

Family relationships

Because women are faced more directly than men with the problems of water supply and sanitation, they can be a substantial driving force behind the installation and maintenance of facilities and the winning of community support for them, provided, of course, that they have been informed about the projects in the first place. Husbands and

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fathers appreciate especially the greater privacy which latrines offer to their wives and daughters. At the same time, cultural and practical factors, including costs, sharing between the sexes, the use of water for flushing toilets and personal hygiene, ease of maintenance, and aesthetics, can be constraints on the installation and use of latrines when the people for whom they are intended are not consulted on design and siting.

Young children are very vulnerable to diarrhoeal diseases, and for this reason safe water and hygiene are especially important for them. The excreta of babies and small children are not always safely disposed of, although they carry the same risks for the transmission of sanitation-related disease as the excreta of adults. Older children often fear the darkness and the hole of a latrine, and may have difficulty in using it properly. Women and girls who care for and educate young children are obviously potential

partners in the planning and implementation of steps that can reduce these drawbacks.

Economic benefits

Women have a very great role in food production and processing, including the provision of water for crops and animals. The collection of water in itself can be classified as an economic activity. The increased energy spent on water collection in the dry season often conflicts with other energy demands, e.g., for pregnancy and breast-feeding; at the same time, women's energy intake is lower because of dwindling food stocks and a disproportionate distribution of food within households. Despite its relevance for the physical and economic wellbeing of the family and the public health of the nation, water collection as an economic activity is seldom included in the gross national product.

Where women face conflicting demands on their time and energy they may reduce the attention they give to child care, cooking and cleaning in order to earn money. On the other hand, they may cut down on weeding and other essential tasks in food-crop production because of a heavy burden of domestic work. A study in the Gambia showed that the incidence of infant diarrhoea was increased because women prepared food in advance so that their older children could feed the younger ones while the mothers worked in the fields (7).

Enhancement of women's involvement

Steps that can be taken to facilitate and support the participation of women in water supply and sanitation projects include the development of more systematic procedures for women's involvement, the adaptation of human resource development and training, and the improvement of cooperation with women's organizations and programmes.

Procedures

Women's participation has so far mainly been in single projects rather than in large-scale programmes. There is therefore a need to develop more general procedures for the involvement of women, in which the form rather than the extent of participation is adapted to the sociocultural circumstances. Male leaders should be made aware that women can make a valuable contribution to community meetings, and should encourage them to take part. Alternatively, local leaders can be requested to organize separate women's meetings, or to bring in existing women's organizations and groups, provided these are not elitist. Women can also be contacted more informally, in small neighbourhood meetings, at their workplaces, or at home.

Community water and health committees should include women. On these committees, women can be selected and trained for tasks of special relevance to them, such as communication with other women and improving domestic hygiene. Where women are members of community water committees, they often hold the office of treasurer. This may reflect their reliability, commitment to a good domestic water supply, and roles in household payments and fund collection. In more segregated or secluded societies, separate women's committees may be culturally more suitable. The functioning of women committee members or women's committees is stimulated if the women in the community are aware of their common interests, are united, and receive the support of project staff.

Women's participation is most common in health education, but this may mean no more than that they are told what they should or should not do, without regard for their practical knowledge and limitations. Didactic programmes of this kind fail to make use of the potential of women for joining in the planning, implementation and evaluation of hygiene improvements, and to indicate the division of responsibilities between men and women.

There are indications that procedures for the involvement of women are best developed through learning-by-doing in the field. The description in field manuals of general procedures for women's participation, and periodic reviews made in the light of field experience, can help to institutionalize women's involvement and facilitate the training of new staff.

Human resource development

The orientation of planners and managers and the training of field staff in respect of the value of women's participation is another way of increasing their involvement. In both institutional and in-service training, more attention should be paid to the value and implications of community participation, including the involvement of women in the planning and implementation of community-based projects.

For easier communication, especially where personal contact between male staff and women is not regarded favourably, there should be female field workers or local intermediaries, e.g., health workers and teachers. Often, technical staff could also work more closely with women field workers from other departments, such as those of preventive health, community development, and women's programmes.

Cooperation with women's organizations

Apart from cooperation in the larger technical programmes, women's programmes and organizations also have great potential for assisting communities and households in improving their drinking-water supply, sanitation and hygiene with their own resources. In Cameroon, for example, the women promoters of the community development programme organized the cleaning and repair of spring catchments as part of their general work. Originally, the programme consisted of a revolving fund for grain mills. To pay back their loan, the women formed milling societies to which members paid a small monthly fee. In total, 200 societies were formed with about 18 000 members. Well-functioning societies continued with other community improvement activities, including the construction of water storage tanks and washing and bathing facilities (8).

Elsewhere, women's groups have started income-generating projects and have used the money earned to construct rainwater collection tanks, protect wells, and improve kitchens. The driving force behind the projects sometimes came from local women, and sometimes from female staff attached to programmes of primary health care, community development, or non-formal education.

Occasionally, women are more systematically trained to carry out community improvements. Courses in water supply, sanitation and other appropriate technologies have been organized for women in, for example, Lesotho, Papua New Guinea, Swaziland, and Zimbabwe. In Thailand the training of villagers in the construction of rainwater collection tanks and water-seal latrines has been made an integral part of the country's primary health

care programme. Health workers have recently requested that half of the trainees be women (9).

Local women's groups may be supported in their efforts to improve water supplies and sanitation by urban or national women's organizations, as in Ghana, Honduras and Kenya. In general, however, the potential of women and their organizations in this sphere has not yet been fully acknowledged. Their efforts deserve more recognition and should be incorporated into national programmes.

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Women, water and sanitation

The involvement of women's organizations in water and sanitation programmes has many advantages.

- Women's organizations are traditionally health-oriented
- Women's organizations provide a channel for communication between women
- Women's organizations provide a forum for legitimizing and popularizing changes in behaviour concerning water and sanitation
- Women's organizations can be important fund-raisers

Women's organizations reach those with the most direct interest and motivation — women themselves — but cannot participate effectively unless their involvement is planned and supported. If they are to contribute successfully, women's groups must have adequate information and resources.

If you would like to know more on how to involve women in water and sanitation activities, write for the brochure *Water*, women and sanitation, available free of charge from the

Division of Environmental Health World Health Organization, 1211 Geneva 27, Switzerland.