



10th WEDC Conference
Water and sanitation in Asia and
the Pacific : Singapore : 1984

The softer side of software in DECADE planning

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Hardware and software have become buzz words for the International Drinking Water Supply and Sanitation Decade (IDWSSD). Hardware to nearly everyone means the technology, the engineering, but to some it also means the planning, implementation and the operational side of projects. To most software covers what WHO has defined as the support services - the socio-economic studies, community participation and health education, including information, motivation, communication and training aspects.

In spite of IDWSSD rhetoric noting the importance, in fact the necessity, of support services if we expect new facilities to be operated, maintained and used effectively, relatively little funding has been allocated to these components. In fact a 1982 analysis of multi- and bi-lateral aid to Water and Sanitation in Sri Lanka revealed that nearly 50% of the thirty on-going projects did not include any support services for community participation, socio-economic studies and health education. All but two projects had a training component, but often these were limited to staff training and did not include training for the field workers who are the outreach to the communities. And none of the projects had specific training for the users.

Most engineers and planners are by now quite familiar with the importance of software in project identification and in selection of appropriate hardware. Many do accept the fact that a socio-economic study has to be completed as part of project planning, but rarely is this seen as the beginning of a change process. Behavioural changes are necessary if the decade's goals in reducing the tragic and wasteful deaths from water and sanitation related diarrhea and parasitic diseases are to be reached.

Concepts

Three concepts are basic to our discussion today:

- 1) Technology is not enough, but it is important.
- 2) Change in behaviour is more difficult than change in technology, but it can be done.
- 3) Germ theory alone is not sufficient motivation to effect change in behaviour, but by linking disease to current practices,

behavioural change is possible.

The objective of this paper is to present women as realistic potential agents for change so that the behavioural changes necessary for effective use, operation and maintenance of improved technologies can take place. The first behavioural change needed is related to the functioning of the hardware. Software is necessary to involve the community in such a way that the people feel responsible for operation and maintenance. This concept and the second need, health education/hygiene education, are both related to women, the primary users and managers of improved systems. From the beginning it is necessary to clarify that women should not be viewed and treated as a special or separate group, but as part of the total community. Women must become more effective partners in carefully designed community participation efforts. A carefully constructed socio-cultural framework in which all community members are seen as actors in the course of the project cycle should emphasize the "non-public", informal and private roles of various groups and individuals within the community, including women who are often "invisible" but important actors. In fact women who as managers of these improved facilities in their communities and in their homes must initiate changes in their daily behaviour and train their families as well, are often forgotten or ignored. Women are the softer part of software.

Behavioural changes in water and sanitation projects require that men, women and children be partners in the project. To truly elicit user participation, understanding the socio-cultural framework makes it possible to see that people are the start and end points for any effective project, process or program. Within the framework, the roles of women in behaviour changes become visible and important.

Impact of DECADE on Women and Women on DECADE

But in this discussion, I want to go beyond a discussion of the needs for software to review a few of the "hows" and "whys" of the necessity for involving women in DECADE activities. A great deal of things have happened since 1980 when in a short, but

widely circulated paper called "Women, Water and Waste" I pointed out some of the impacts of women on water and sanitation projects. Most of the emphasis before 1980, had been on the impact of projects on women, the elimination of tiring hours of drawing and hauling water. And we must never forget this part of the picture, because still today many women are coping with scarce and distant water supplies, spending hours of time and often 50% of their energy in arduous tasks.

At the 1980 World Conference of the UN Decade of Women a strong resolution was adopted that specially mandated "Member States and UN agencies, including specialized agencies, to promote full participation of women in planning, implementation and application of technology for water supply projects". Recognizing the impact which women can have on the success of water and sanitation programmes, at its 9th meeting held April 1982 the United Nations Steering Committee for Cooperative Action, composed of UN, UNDP, ILO, FAO, World Bank, UNICEF, UNESCO, UNEP, and INSTRAW, decided to establish an inter-Agency Task Force on women and the IDWSSD. A paper entitled "Strategies for enhancing women's participation in water supply and sanitation activities" was developed by the Task Force and distributed to international agencies including the United Nations agencies, the bilaterals and the international NGOs as well as governments of the developing countries.

The Strategy paper emphasized integration of women's participation as part of the general efforts in water supply and sanitation activities. It urged governments to integrate into national planning and programming for Decade activities women's needs and involvement. It recommended that governments coordinate their activities with non-government groups, including existing women's organizations. It suggested that international agencies promote awareness of the importance of involving women in Decade activities giving technical support to national efforts to promote women's participation, and share experience of how to promote women's participation in Decade activities.

Today there are new projects such as the recently funded UNDP Interregional Project on Promotion and Support for Women's participation in the IDWSSD, funded on a cost-sharing basis by the Norwegian Government with UNDP as the executing agency in association with other UN agencies and organizations. (Ref 3). As noted in the project document, the long-term objective of this project is to support the global effort of the 1980s to develop water supply and

sanitation systems which will enable participating governments of developing countries to provide safe water supplies and adequate sanitation facilities for most of their people by 1990 and to improve the positive impact on the health and welfare of families in peri-urban and rural communities with a view both to enhancing effectiveness of these activities and to increasing the well-being of the women themselves and their families.

The four specific objectives of the project are:

1. To establish a sound information base documenting ways in which increased participation of women in water supply and sanitation and related health education programmes will improve their functioning, utilization and impact on health and well-being.
2. To increase the appreciation within government, bilateral and multilateral agencies and institutions responsible for implementing Decade activities of the importance of socio-cultural aspects of project feasibility; and of community participation, especially by the communities' women, in all stages of water supply and sanitation projects.
3. To provide guidance to policy makers, planners and managers on how to obtain meaningful community, and particularly women's involvement in various roles and at various stages of project implementation and follow-up.

In reviewing the 1982 draft for this project, Jane Bunnag, UNICEF Regional Advisor for Asia and the Pacific, wrote that water and sanitation projects have often been badly designed in terms of meeting community needs, and that projects designed and implemented with community involvement would naturally reflect women's pivotal role in all the activities.

Participant Observation

An operational approach using participant observation to gather qualitative data is recommended to design surveys and hygiene education messages. Ideally, the person carrying on the study lives in the community, usually for weeks or months, participating in the daily lives of the people, carrying water, using their sanitary facilities, eating with them.

For water and sanitation project planning, an "environmental sanitation walk" can be considered an abbreviated use of this technique but if limited to a 9 to 5 observation period many of the daily activities will be missed. Many activities concerned with environmental sanitation such

defecation, carrying water, bathing, dumping refuse, cleaning public and private places, occur at dawn or dusk. And women are unbelievably invisible at these times. A day's visit, starting early and ending late, by a sensitive person, or better yet, a man or woman, who can work together or separately, can yield valuable data. Several days, including a weekend of intensive participant observation can produce much more of the data needed on water uses and defecation patterns - on knowledge, attitudes, and practices - than a costly survey. The importance of involving women - both as observers and as observed - in this early planning cannot be over-emphasized.

HOW TO - IMPLEMENTATION

In this paper, user participation means community involvement where the people feel a part of the project from the beginning. By opening channels of communication with all sectors of the community, a sense of ownership and pride in the new technologies can be fostered. We have seen that technology is not enough. To change behaviour in water and sanitation, the users must be partners in the project. User participation should be a prelude to all efforts, a master marketing strategy with genuine feedback so as to improve the impact of water and sanitation programmes. And who are the primary users? Women. And how can women become involved in implementation?

Behaviour change

For many people implementation is the construction phase of project. Too often self-help in the building of community water supplies or home latrines is considered enough community participation. However, the whole cycle of behavioural change needs to be discussed and planned for. The appropriate ancillary equipment is an integral part of the improvements in water supply and sanitation. Often technicians and planners assume that communities have what is needed and that people know how to use the improved facilities. To give an example, the complete chain from faeces to hand washing, to soap to drying, to appropriate disposal of cleansing materials and sullage is often assumed. And often essential equipment and knowledge is missing. The linkages between behaviour and technology needs to be stressed, and the roles of women, as individuals and in groups, understood.

Decision-Making

In fact women's decision making within the home, in the allocation of household budgets, cannot be over-emphasized. As managers of water and sanitation within the home they may decide to use their limited funds for an

improvement, knowing the savings in time, energy, or recurrent costs of sweepers or water vendors (Baldia). In other studies, when women have personal income they spend a larger portion of it than men for household improvements, including water supply and sanitation (Honduras, Sri Lanka). After women have had the savings in time and energy from a closer, cleaner source of water they will agitate (Mexico), or organize to raise money (Panama) to get the facilities fixed when they break down.

HOW TO - OPERATION, MAINTENANCE AND TRAINING

A part of the necessary software is training the operators and the users of the systems. In order to have more than just more water systems and latrines, we must go beyond access to the improved technologies, to an understanding of the human elements, the operators and the users. One of the greatest problems is going beyond access to new facilities is access to women who must understand how to use the new technologies and have incentives for changing behaviour in order to break the tragic fecal-oral route of infection with its accompanying diarrhea, continuing illness and death for many children. And along with access there must be appropriate training methods and materials (8). All training of women should relate to their existing roles, help in alleviating unnecessary burdens, and improve the quality of life for them, their households and communities.

SUMMARY

The thrust of this paper is to suggest a software methodology which will enable women to identify needs, surmount problems and make decisions based on information and understanding about choices. By an integrated approach to community-defined needs women, in groups and singly, will be motivated to adopt new patterns of behaviour and attitudes so that the active and passive layers of women's participation in various sectors will be strengthened. Peer support will serve to help establish new attitudes and behaviours/activities which synergistically will improve the health and welfare of women and their families in the most disadvantaged sectors of the population. The Pakistan case study (8) in Baldia shows how even illiterate women can be agents of change in a traditional moslem society where older men are the authoritarian figures and women are segregated. Even when invisible women have important roles to play, 'Take me to your leader' is enough.

At the conclusion of its preparatory year in June 1984, the UNDP project mentioned above had received specific expressions of interest from 25 countries, 10 project identification missions had been fielded, and draft

proposals were under preparation in Kenya, Zimbabwe, Indonesia, Honduras, Nepal, Sri Lanka, Bangladesh, Upper Volta, Lesotho and Botswana. An annotated bibliography on Women's Roles in Water Supply and Sanitation is being prepared in collaboration with IRC in the Hague.

Networks of collaborating institutions and individuals have been established, workshops and seminars held. The softer side of software is being recognized as a key component in DECADE activities.

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