WOMEN, WATER SUPPLY AND SANITATION
- a national training seminar -

Addis Ababa, Ethiopia
23 - 28 November 1987

sponsored by

the United Nations International
Research and Training Institute
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INSTRAW

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One of the major objectives was to provide safe and adequate drinking water to the population. To this end, various conditions were assessed and goals which were believed to be achievable were set up in a manner that was compatible with the capabilities of the country's economy. Regarding urban and rural sanitation, an attempt had been made to propose a plan that could be achieved on the basis of existing conditions and experience.

Urban Water Supply

The target was to provide safe and reliable water supply to 85% of the urban population by the year 1993/1994. This meant that improvement, emergency and construction works on 67 towns would be carried out. Also, feasibility studies would be conducted in 96 towns. Regarding the service target, by the year 1993/1994, it was envisaged that at least 5.2 million of the urban population would be provided with safe and reliable water supply.

Rural Water Supply

The target of rural water supply was to provide safe and reliable water supply services to 35% of the rural population. The following targets were set in the ten-year plan period.

Types of scheme	Target
Springs	897,000
hand dug wells	10,400,000
Sub-surface dams	202,000
Slow sand filters	143,000
Boreholes	2,069,000
Ponds	76,000
Cisterns	54,000
Population served	15,469,000

It was envisaged that 15.5 million of the rural population, would be provided with water supply by the end of the Decade.

Regarding, actual water supply coverage, it was possible to provide safe water to only 2.1 million out of 38 million of the rural population and to 2.7 million out of four million urban population by mid 1983, i.e., the beginning of the Decade period in Ethiopia.

At present, about 10% of the rural population and the majority of the urban population have access to safe water supply. Regarding urban water supply services, though piped water supply systems exist in some of the towns, some parts of the town population do not yet have adequate water supply.

Urban Sanitation Service

In planning urban sanitation services, different towns were classified into three categories:

1. The decade plan was expected to provide 20% of the rural population of Addis Ababa with a sewage collection system and to provide on additional 20% of the population with vacuum truck sewage collection service.

2. It was planned to carry out a feasibility study and design for the provision of sewerage system of 12 major towns.

3. In order to provide all urban centres with vacuum truck services, it was planned to station a number of trucks in major towns of the administrative regions and provide service to the surrounding urban centres.

Concerning the issue of women, water supply and sanitation, since women were considered part of the community, the issue of women and water was faced with the community as a whole; and the involvement of women in WSS projects was encouraged. Their role was believed to be a determining factor in such projects and programmes. To this effect, various measures were taken. The facilitation of greater access to training in different technical aspects related to water was encouraged as well as the inclusion of women members in village water committees.

II. ORGANIZATION OF THE SEMINAR

The national training seminar, "Women, Water Supply and Sanitation, was convened at the International Livestock Centre for Africa in Addis Ababa, Ethiopia, from 23 to 28 November 1987.

The seminar was sponsored by INSTRAW (United Nations International Research and Training Institute for the Advancement of Women) in collaboration with the Economic Commission for Africa (ECA), the United Nations Children's Fund (UNICEF), and the United Nations Development Programme (UNDP).

Over forty participants represented their respective ministries, agencies and organizations (see ANNEX I).

Also participating in an observer capacity were representatives of twenty-one agencies and organizations (see ANNEX II).

A. Opening of the seminar

The opening of the seminar was co-ordinated by Mr. Peter N. Mwanza, Chief of the Natural Resources Division of ECA. He introduced Ms. Assegedech Bezuneh, Chairman of the Revolutionary Ethiopian Women's Association (REWA), who made an opening statement.

This seminar, she said was an important one to women of developing countries, because water supply, and sanitation were issues which were close to their hearts. In developing countries, the problem of water was a problem affecting women since in most cases women travelled long distances to fetch water, a task which took precious time and which was not appreciated by the family, the community, nor the policy makers.

The issue of water supply was not limited to this alone. It also involved the health of not only women and children but also of the whole community. Moreover, being a problem of development, it involved a number of issues all intrinsically interconnected.

Included in the proclamation that established REWA, was a provision that entrusted it with every effort to ensure that appropriate conditions were created to enable women to properly discharge their responsibilities as mothers and citizens and thus be fully integrated in the development endeavours of the country. The implementation of this provision involved a number of issues, one being the supply of clean water to women within their community. REWA tried to discharge this task in collaboration with the government and other mass organizations. In the rural areas, members of the community through their associations, participated in a number of public activities, one being the provision of water supply. They dug wells, built and ran water projects, clean springs etc. In this process, women through REWA were involved from the planning to the execution stage.

On a higher level, REWA owned and managed a big water project in Arsi region, the Dodota Water Supply Project. This water project was built through the assistance of SIDA, as well as the cash and labour contribution of the inhabitants of the Dodota district. The project involved training of women aimed at equipping them with the knowledge of managing the project and maintenance work. What made this project one of its kind was the fact that the project aimed not only at providing clean water but also at changing the lives of the people. At present the project provided clean drinking water to 17 villages and three towns. It also gave employment opportunities to 43 people, mostly women.

Looking at the situation in Ethiopia she noted that out of the 42,019,500 people (as per the May 1984 census), only an estimated 14% had clean drinking water. In the rural areas, about nine percent of the people had access to clean water which though seemingly small was a great achievement when one compared with the two percent in pre-revolutionary Ethiopia. On the other hand, the 10-year Perspective Plan indicated that 35% of the rural and 85% of the urban population would get clean water at the end of the plan period.

To put this plan into effect, the People's Democratic Republic of Ethiopia had undertaken a number of activities. It had also carried out a number of activities towards meeting the target of the International Drinking Water Supply and Sanitation Decade as well as Health for All by the year 2000. She believed it was the duty of mass organizations including REWA to help the government meet these great challenges.

In conclusion, the Chairman reiterated her appreciation to INSTRAW for taking the lead in helping states to implement the objectives of the Decade, to which this seminar was a witness.

The co-ordinator then introduced Mr. Mbatkam Tchouta Moussa, Deputy Executive Secretary of ECA.

The Deputy Executive Secretary expressed his pleasure to welcome the participants of the seminar on behalf of the Executive Secretary of ECA.

He went on to say that not only were the countries of Africa in the grips of an economic crisis of unprecedented magnitude, but also many were prone to drought and desertification and at the mercy of failures of seasonal rainfall. Nowhere was this so clearly seen as in Ethiopia. The terrible drought of 1972-1973 was followed by an even more severe drought (in terms of its consequences on human life) in 1984-1985. The shortage in rainfall over much of Ethiopia this year was precipitating yet another emergency situation.

For this reason, the African Priority Programme for Economic Recovery, produced jointly by ECA and the OAU in 1986, highlighted action to be taken at national level in four major sectors:

(i) agricultural development;
(ii) other sectors in support of agriculture;
(iii) drought and desertification; and
(iv) human resources development, planning and utilization.

All these sectors recognized the importance of water resources development as well as the role of women in development. Indeed, the report of the Ad Hoc Committee on the Critical Economic Situation in Africa to the Thirteenth Special Session of the United Nations General Assembly stated that:

"The role of women in development must be taken seriously into account in development planning and in the disbursement of resources, both as contributors and beneficiaries of development efforts as recommended by the Arusha Forward-looking Strategies for the Advancement of Women in Development Beyond the United Nations Decade for Women."

During an emergency situation, the provision of food, water and sanitary facilities was crucial to saving human life, and the role of women was pivotal during this phase.

In terms of medium-and long-term development , women, water supply and sanitation were no less important, bearing in mind the interrelationships between agriculture and water supplies, health and hygiene, and economic development and the quality of life.

With regard to this seminar, ECA was only playing its role in promoting the United Nations International Drinking Water Supply and Sanitation Decade in Africa. The seminar was a national seminar and, its success would depend on the active participation of the group.

On behalf of the Executive Secretary, he wished success in the endeavours of the seminar and said he looked forward with great interest to reading the final report which would have a significant impact both nationally and regionally.

He again expressed his gratitude to the gracious hosts - ILCA - and to the organizers of the seminar.

Mr. Mwanza then introduced the Deputy Commissioner of the National Water Resources Commission (NWRC), Mr. Kefyalew Achamyeleh.

Mr. Kefyalew expressed his pleasure at being given the honour to address, on behalf of the National Water Resources Commission of the People's Democratic Republic of Ethiopia, this important, seminar on Women, Water Supply and Sanitation. He expressed his appreciation to the organizers for having selected Ethiopia as one of the countries in which this activity would be carried out, where by virtue of this selection the NWRC would be the major beneficiary.

The reality that women were the ultimate users of water supply and sanitation systems, rendered them intimately knowledgeable about various aspects of this sector and he felt it therefore went without saying that they should be given decisive roles in planning, constructing, operating and maintaining these facilities.

It was not sufficient to pay lip service to women's participation. It was necessary, he said, to consciously plan and develop water supply programmes with women as an integral part, both as planners and as full participants in implementation and running of completed systems. In the coming years, women's participation and role should be the main themes around which water supply and sanitation programmes would be geared in the developing world.

Women's role, although crucial in society, was often 'invisible' and taken for granted. As home managers who make important decisions, women were responsible for the family's choice of water for cooking, drinking, laundry, bathing and other needs. As the major beneficiaries of improved water supplies and sanitation systems, and as mothers training their children in basic hygiene, women largely determined the accessability of new facilities in the community, and many projects had been doomed to failure by inadequate consideration of their knowledge, attitudes and practices. As a political lobby, women represented a powerful influence in promoting government spending in the sector. It was unfortunate that planners and engineers often failed to see women's active roles in the community, as though projects were primarily male concerns.

African rural women were seen to grow, process, market, store and prepare food. They earned income in the agricultural labour force in sub-Saharan Africa. This estimate, however, was conservative because much of women's work was outside the cash economy, was home-based and seasonal in nature. More detailed studies showed that women contributed as much as two-thirds of all hours spent in African agriculture. Based on the tasks, women provided most of the labour required for weeding, harvesting, transporting, storing, processing and marketing of crops in addition to carrying water and fuel-wood, preparing food and taking care of the family.

The Government of The People's Democratic Republic of Ethiopia, taking due cognizance of the important role played by women in the national economy, and in recognition of the need to integrate them in all development activities, took the important step of establishing the Revolutionary Ethiopian Women's Association (REWA) in July 1980.

Perhaps nowhere was the importance of women's participation appreciated more than in the field of water supply and sanitation. A community participation department whose major activity was the promotion of women's participation had been established in the Water Supply and Sewerage Authority (WSSA) which was one of the executive arms of the National Water Resources Commission. The department had become an important part of the foundation on which the Ten-Year Perspective Development Plan of the water supply sub-sector had been built. In the

guidelines given to the designing and operating organs of water supply schemes in the country, there were clear instructions that at least two members of village water supply committees should be women in order to ensure the incorporation of women's dimension in every water supply scheme.

On the human resources side, women were being trained in greater numbers by NWRC to assume positions of skill and responsibility.

In this respect, he assured the organizers that the NWRC and other Ethiopian ministries and agencies had tried to make available a good cross-section of planning, implementing and operating staff to attend the seminar, believing that the exercise would familiarize them with essential aspects of women's participation in water supply and sanitation projects and would thus facilitate their work.

Finally, the Deputy Commissioner expressed his best wishes for a successful seminar that would attain the intended objectives.

He thanked INSTRAW and all collaborating agencies for having organized this seminar in Addis Ababa.

B. Election of officers

After the official opening of the seminar, the officers were elected as follows:

Chairman: Tsefaye Haile

Vice-Chairman: Nigat Mengesha

Rapporteurs: 1. Tabotu Wolde Michael
2. Tebeyin Tesfaw

C. Adoption of the agenda

The agenda of the seminar was then adopted (see ANNEX III)

D. Closing the seminar

During the course of the seminar, the question of coordination was brought up repeatedly. A representative of the Office of the National Committee for Central Planning (ONCCP) Mr. Gedion Asfaw, Head of the Natural Resources and Human Settlements Department, was therefore invited to attend the closing session.

Mr. Gedion outlined the structure and functions of the ONCCP.

The ONCCP, he said, was a government organization charged with the drawing up of national development plan, allocation of resources and follow up of plan implementation.

Since ministries and other implementing agencies drew up their plans in accordance with the guidelines and budgetary framework issued by ONCCP, plans were ultimately reviewed and approved by a council of ministers, state council, the Party and "Shengo".

The ONCCP had eight regional offices headed by commissioners. The regional executive committees chaired by the first party secretary of an administrative region drew up, reviewed and carried out the follow up of plans.

Coordination of line ministries at regional level was done by this executive committee of which the Secretary was the regional ONCCP office. The institutional framework for drawing up plans and carrying out coordination existed, but strengthening the capabilities of the different institutions in many aspects was what needed to be talked.

Regarding the Women's Unit at ONCCP, Mr. Gedion stated that there was a proposal to create a women's unit at the ONCCP. This would be decided after discussion with REWA officials. The proposal stipulated the recruitment of three national experts and one external advisor for two years. The unit would represent REWA at the ONCCP and, it was hoped, would influence development plans in favour of the interests and requirements of women.

In the discussion that followed, it was further clarified that a forum for discussion on the problems of coordination did in fact exist and that ministries should take the initiative to convey their problems at this forum.

It was pointed out that there needed to be greater recognition of the importance of sanitation and that perhaps a national plan would thus put more emphasis on the issue. It was explained though, that available resources had to be considered when planning and that resources were not allocated to all sectors. Agriculture, water supply, health and industry were considered to be the priorities.

Regarding the proposed Women's Unit, the representative of the Ministry of Labour and Social Affairs noted that the Ministry was now mandated to be responsible for women's affairs and asked how the two would be coordinated.

Mr. Gedion reiterated that the Unit at ONCCP was still at the stage of being a proposal, but that it was felt that REWA should be represented in the Government machinery.

The representative of REWA noted that REWA had a horizontal relationship with the line ministries, but that there was a gap in this relationship and hence the need for the Women's Unit at ONCCP.

The representative of the Ministry of Labour and Social Affairs expressed the Ministry's willingness and readiness to work with all agencies and organizations.

The issue of education was also raised during the discussion and the representative of the Ministry of Education wished to point out that a very extensive infrastructure already existed through which women's activities in water supply and sanitation could be enhanced.

Finally, two general recommendations emerged from the discussion:

1) The role of REWA in women, water supply and sanitation should be strengthened.

2) Throughout the whole planning process, particularly with regard to water supply and sanitation, the importance of education should be emphasized.

The Chairman of the Seminar, Mr. Tsehaye Haile then made a closing statement.

He noted that the seminar had been unique and timely and that participation had been relevant and high-level.

Five broad and important modules had been thoroughly studied by the participants both on plenary sessions and group discussions. Valuable recommendations had been put forth, experiences had been shared by the participants who treated the modules diligently and professionally. Each module was presented by capable resource persons who skillfully interpreted the modules in the Ethiopian context, enriching them also with personal field experiences.

The question of women, water supply and sanitation was one of the most important issues of our time, he felt. It had drawn the attention of international organizations, national development agencies, development agencies, development planners, researchers and NGOs - both small and large.

The increasing attention to Women, Water Supply and Sanitation was not without justification. Besides the established fact that women serve as the managers and decision makers for the provision of domestic water supplies and waste disposal, the current positive attention to women, water supply and sanitation emphatically confirmed the inseparable link between safe water supply, adequate waste disposal and health. Water, he felt, was health and safe water was better health.

The participants had emphatically reiterated the advantages of women's involvement in WSS projects from their inception to the planning, implementation, and operation and maintenance phases. It was also recognized that a significant pre-requisite to the successful involvement of women in WSS was a wholehearted and steady commitment on the part of implementing government agencies (IGA) to clearly formulated, well publicized and realistic policies that considered women's interests and needs.

The need of task-oriented training programmes geared to women and the introduction of positive discrimination favouring women as a remedial measure to resolve the prevailing serious shortage of women decision-makers, engineers, planners, researchers, technicians, etc., were strongly highlighted by the seminar participants.

In conclusion, the chairman thanked INSTRAW, UNDP, ECA, and UNICEF for organizing this important and timely seminar on Women, Water Supply and Sanitation, the ministries and NGOs for sending enthusiastic and knowledgeable participants and ILCA for providing conference facilities and services which contributed significantly to the success of the seminar. He also thanked the resource persons who enlightened the group with their expert interpretation of the modules and for sharing their valuable practical field experience.

Finally, the Chairman thanked all the participants for their cooperation, and the organizers of the seminar for their contribution.

III. SUBSTANTIVE ISSUES

A. Module I: Introduction to the IDWSSD and INSTRAW

Module I, Introduction to the IDWSSD and INSTRAW was presented by the representative of INSTRAW, Ms. Stephani Scheer de Vela. Currently a consultant for INSTRAW, Ms. de Vela served as a member of the INSTRAW staff for a number of years, and was actively involved in the development of the Institute's programme, Women and the IDWSSD, including serving as a member of the Inter-Agency Task Force on Women and the IDWSSD.

The representative of INSTRAW made a brief statement welcoming the participants. She thanked them and the Government of Ethiopia for its support to the activity. She thanked ILCA for providing conference facilities and services. She expressed appreciation to the co-ordinating committee, representatives of ECA, UNICEF and UNDP, for all the time and effort they had given to the organization of the seminar; and finally, to the Government of Italy for its generous financial support.

In her presentation of Module I, she noted that recognition of the seriousness and the vital importance of improving water supply and sanitation worldwide had been underlined by the international community at the United Nations Water Conference held in Mar del Plata, Argentina back in 1977, which resulted in the subsequent launching of the IDWSSD in 1980.

A Steering Committee for Co-operative Action had been established, comprised of eleven relevant United Nations specialized agencies and organizations. The objectives of the Steering Committee were to put into operation mechanisms designed to help match projects with external sources of funds, exchange technical information between countries, shape global plans for human resources development, advise on formulation and investment planning, and assemble comparable data for progress reporting and public information on the Decade as a whole.

In 1985, a review was made of the progress in the Decade in the form of a report to the General Assembly through the Economic and Social Council.

At the mid-point of the Decade, it was found that some 1,200 million people still lacked safe drinking water and some 1,900 million people lacked adequate sanitation. These numbers of unserved people represented more than twice the number of people provided with clean water during the first half of the Decade, and more than 20 times the number reached with adequate sanitation.

The consequences of this situation were extremely evident, she noted. Less evident, though vital in consideration of the situation, was the role of women.

Women were the carriers of water, managers, users, family health educators, motivators and agents of change. They were responsible in this regard not only for themselves, but also for the members of their families and the community at large.

Any strategy for women's participation, she said, needed to consider water supply and sanitation as an integral part of the entire development process along with other socio-economic sectors.

Within the framework of international community, one of the mechanisms established to address the question of the role of women in water supply and sanitation, was the Inter-Agency Task Force on Women and the IDWSSD. The Task Force was created as part of the Steering Committee for Co-operative Action.

Within the framework of international co-operation, the United Nations International Research and Training Institute for the Advancement of Women (INSTRAW) was seeking to make an important contribution to the implementation of the objectives of the IDWSSD.

Mandated to act as a catalyst, the objectives of INSTRAW were to stimulate and assist, through research, training, and collection and dissemination of information, the advancement of women and their integration in the development process, both as participants and as beneficiaries.

Since its inception, INSTRAW had worked to improve methodologies for training. INSTRAW remained firmly committed to innovative approaches to training, recognizing the urgent need for a shift from didactic instruction to more participatory methodologies, involving communication and media support as essential ingredients.

As part of its programme, and with the support of the Government of Italy, INSTRAW and the International Centre for Advanced Technical and Vocational Training (ILO/Turin) had prepared the multimedia training package on Women, Water Supply and Sanitation.

The package reflected five years of research by INSTRAW, including a survey of material, projects and activities undertaken by other United Nations agencies and bodies, inter-governmental organizations, bi-lateral agencies and non-governmental organizations. Using a modular approach, the package aimed at two major target groups: national development officials and women's organizations. The major objective was to foster awareness of the close relationship between women and water, and help to ensure women's participation at all levels and stages of water supply and sanitation programmes and projects.

Now before the package is reproduced in its final form and distributed world-wide, she said four national training seminars, such as this one, were being conducted to determine its applicability.

In distributing the training package, INSTRAW hoped to strengthen the institutional capacity of developing countries in water supply and sanitation.

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In the discussion that followed the presentation of Module I, it was asked how the Government of Ethiopia addressed itself to the question of women particularly in relation to the present topic of the seminar. This gave rise to a number of responses from the various ministries.

The Ministry of Agriculture's (MOA) role especially the Women's Division was said to be mainly in the training of women in the use of water, while Ministry of Health (MOH) was involved in sanitation, particularly in education on the safe use of water at the domestic level. It was also stated that sanitation was only a small department in the MOH and that there was great need for better co-ordination among the various government organizations for national activities on water supply and sanitation. Furthermore, there were manpower and financial limitations and meaningful co-ordination could only be effective through sharing of resources.

Representatives of the Ministry of Education (MOE) informed the seminar that they had radio programmes on health and sanitation for the public. A suggestion was also made by a representative of MOE that the crucial problem of family planning should be given consideration when dealing with questions related to women, water supply and sanitation.

The points of what role men should play without changing the traditional role of women, and how much of a role literacy could play in WWSS were raised.

The Revolutionary Ethiopian Women's Association's (REWA) objectives and some of its activities were briefly outlined by REWA's representative who also emphasized the organization's strong wish to work closely with various organizations and agencies in the country on women's needs, problems and their solutions.

A question was put forth of how effective were the designations by the United Nations of various decades.

Two replies given to this question pointed out that decades helped in raising awareness globally. The decades were more important on the national level than on the international since they were effective only so far as national governments were involved in them by traslating them into action.

There was a brief outline given on how the IDWSSD came about after 1977 and that it had become a banner around which to rally. It was learnt that there were 31 National Action Committees (NAC) in Africa and that the programme, while showing good progress globally had met with less success in Africa. Reasons for this were said to be the economic crisis, the drought problem and general economic stagnation. However, it

was also stated that there was some success in identifying areas of need or emphasis and co-ordination of donors and agencies, especially on consultations to get more money into the sector. Progress on the sanitation side was said to to be slow because of other health priorities.

A participant from MOH explained that, although Ethiopia had responded promptly by establishing a NAC composed of eight ministries, it had not been possible to set up an office and create a technical committee which would have been responsible for the Decade. Instead, the participant added that the NWRC was established and its executive council, consisting of vice minsters of concerned government ministries including MOH, was entrusted with the responsibility of the Decade activities.

B. Module II: Participation of women in planning water supply and sanitation projects

Module II, participation of women in planning water supply and sanitation projects was presented by: Mr. K.A. Edwards, Chief, Water Resources Unit, ECA; Mr. Tesfa Mariam Tekie, Acting Head, Multisectoral Unit, ONCCP; Mr. Barsula Sermollo, Chief Engineer, WSSA; and Ms. Almaz Wondimu, NGO Co-ordination Unit, MOA.

Mr. Edwards had been working for over 17 years in Africa, first as a Research Hydrologist with the East African Community, later as a specialist on Water Resources Development in various East African countries. Before joining the United Nations, he was the Chief Water Resources Officer in Malawi where he managed some highly successful low-cost rural groundwater supply projects.

Since 1983, he was the Chief of Water Resources Unit in ECA. An important part of his work was monitoring progress with the Mar del Plata Action Plan of the 1977 United Nations Water Conference, including the International Drinking Water Supply and Sanitation Decade.

Mr. Tesfa was the National Co-ordinator and Facilator of Rural Integrated Basic Services (RIBS) and Urban Integrated Basic Services (UIBS) - UNICEF Assisted; National Co-ordinator for Joint Nutrition Support Programme (JNSP) through which the National Food and Nutrition Strategy is implemented; and assisted in the implementation of other similar projects (both bilateral and multi-lateral).

Mr. Barsula had been the Chief Engineer at WSSA since 1985 and specialized in both electrical and sanitary engineering with advanced degrees in project preparation and water works administration.

Ms. Almaz was with the NGO Programme Co-ordination Unit of MOA in which NGO support was being used to assist farmers in drought affected areas.

In introducing Module II, dealing with women's participation in the planning of water supply and sanitation projects, the representative of the Economic Commission for Africa, Mr. Edwards, stressed that the module was both skeletal and general in nature. It was up to the participants to apply the information contained in the module to the Ethiopian situation.

The module dealt with integrating women's requirements and considered how to involve women, the economic and health benefits of water and sanitation projects, and the specific ways in which women could contribute to such projects.

From the point of view of community participation, there was a requirement for a needs assessment - particularly the needs of women and children. Communication and dialogue with the community was the first step in involving the community and women in project planning.

Other benefits ensuing from women's participation stemmed from their intervention concerning design and choice of technology, and also in health education. Such intervention would be limited without appropriate human resources development. Although Ethiopia had made more progress than most African countries in terms of training women at all levels, there was still a need to assess whether this was enough and, if not, where were the priority areas.

The role of women in construction and in operation and maintenance was also mentioned in the context of imparting the feeling of ownership of the waterpoint, thus ensuring the long-term success of a scheme, particularly with regard to maintenance.

The final section of the module dealt with waterpoint management. In this respect, women were both managers and decision-makers. It was imperative to seek their views in designing and installing new water sources.

Before going on to introduce the other resource persons, the ECA representative highlighted several key issues which were in relationship to women's participation in the planning of water supply and sanitation projects.

The first was concerned with the planning process itself. Because it was essentially a top-down system, it was important to establish two-way communication, i.e., both top-down and bottom-up, and investigate the ways in which women could intervene in this two-way dialogue.

independent self-reliant economy; while in the shorter-term the goal was to alleviate current economic and social problems, as well as laying the foundation for socialist reconstruction.

With regard to the involvement of women in planning WSS projects, he strongly emphasized that sectoral or piece-meal approaches , whether at the grass-root or national level were likely to exacerbate the inefficient utilization of scarce resources at the disposal of the country. Tackling the major problems of women at their source (with the central guidance of the ONCCP) in a convergent, mutually supportive and in a participative manner were required. Such actions could override the difficulty of reconciling the contradictions that emanate as a result of the application of vertical and lateral procedures in planning.

Such inter-sectoral co-ordination was the most feasible as well as acceptable approach to the alleviation of women's plight in general and with regard to water and sanitation problems in particular. It was deemed acceptable because this approach would effectively address the diversity of problems surrounding women, water and sanitation. The involvement of women in the planning, implementation and evaluation of their own services should be strongly encouraged by all concerned. Concurrently, Government's inputs should be consciously co-ordinated with the aim of supplementing and reinforcing (and thus optimizing the benefits accruing), rather than substituting or shadowing local community resources and efforts.

Mr. Barsula, in this presentation, felt that the seriousness of the problems involved in the area of water supply and sanitation were great and that the demand on those types of services was growing tremendously. Therefore, it was very important to make women's participation in planning of water supply and sanitation projects more effective, in order to have more productive output and to make their work easier.

Since women were the primary drawers and users of water, he noted that it could easily be seen how water and sanitation programmes benefitted them. Thus, they helped determine the success of the scheme if involved when water and sanitation projects were planned and implemented.

Participation of women in planning water supply and sanitation projects would enable the development of realistic and appropriate technologies, by taking into consideration cultural, social, physical and financial specificity.

Society being the beneficiary of the water supply and sanitation scheme, non-involvement of women in planning clearly lead to uneconomical use of capital investment.

Lack of consultation with women regarding technical aspects lead to improper design and inadequate attention to details.

By involving women in the planning, design, and operation and maintenance stages as well as in health, operation and maintenance education programmes, the water and sanitation projects would be more effective in achieving the ultimate goals of improved water quantity, quality and health.

Since women were involved in all activities of rural and urban communities, their involvement in the planning and provision of water and sanitation programmes could help to facilitate the changes which inevitably accompanied the introduction of new concepts, technologies and facilities into a community.

Women as the primary users and managers of water resources and as the main influence on family sanitary habits could contribute a great deal to the better planning, functioning and utilization of the improved facilities when provided with appropriate training and support.

In a water supply and sanitation project, he noted, to design appropriate systems was simple, but the problem that remained was how to ensure that they were used and maintained; and that they continued to operate.

In many cases, maintenance and repair had been planned without the involvement of women thus leading to consequent neglect of the installation and eventual failure of the programmes.

Their traditional involvement showed that women had a potential role to play in such projects, benefiting both the projects and the women themselves, and contributing to wider development.

The participation of women was not only important for ongoing and new WSS projects but could also contribute to the achievement of the target for improved water and sanitation for all. Programmes and organizations for women at the national level had the particular potential to assist women to make their own improvements to water supply and sanitation.

In closing, he said that the involvement of women in all project stages and at all levels, by building on their roles in domestic water supply and sanitation could be a contributing factor to the achievement of short and long term benefits of water supply and sanitation improvement.

In her presentation, Ms Almaz said that the aim of the NGO Programme Coordination Unit of MOA was to help farmers increase food production on a sustainable basis by minimizing their drought vulnerability and improving their productive and managerial capacity towards self-reliance.

The approach was a grass-root participatory development approach in which the community played the determinant role starting from need identification, project planning and project implementation. NGO supported projects got technical support from MOA and NGO field staff. Although, these projects differed from each other in many ways, they had a similarity in that they identified water development as one of their most urgent needs. These projects, big and small, amounted to about 25 with more than 50 million Birr of funding.

They consisted of grass-root projects formulated by community need identification and participation in planning and were being implemented by the existing managerial capacity of the Service Cooperatives (SC) and Peasant Associatives (PA). They were not large capital intensive projects, but were mostly projects manageable by farmers after some training to ensure continuity after the support period.

In each of the projects, members of PAs, members of women's association's and members of youth associations were invited to the need identification session.

The most urgent needs were listed in order of priority for each PA and then they were verified at the SC level.

In this exercise, women's representation was not only low but participation was at its minimum, except in areas of water development. Here, women's intervention as low as it was in other areas, was well articulated and, at times, supported by evidence.

She stated that the methodology used by MOA was participatory development planning. At that stage, MOA confined itself to the lowest unit of rural development - the PA and SC executive committees. Representation of women being almost nil at PA and SC executive level, MOA invited the Executive Committee of women's associations - and tried to convince the SC Executive Committee that they should include women's associations representatives for purposes of implementation of these projects. At this point, she pointed out that almost all development agents of MOA were men at the SC level and including women in the SC committee was only an arrangement made for the purpose of these projects.

What was done was to verify the most urgent needs with this group and urge them to come up with suggestions to solve their own problems; ask what technology they prefered; what contributions they would make, who

made the contributions; how they would implement the project; what technical, material, financial, training and other support they needed. MOA technical people introduced new technologies not mentioned and gave guidance to farmers at the session.

MOA had observed that not only women but the community as a whole identified their problems in proper order of priority. The community considered itself ready to contribute the labour it had and its managerial capacity at both PA and SC level.

In concluding, she said that MOA had observed that:

- the institutional development unit being used was male dominated;
- the development agents and technical support people were male-oriented;
- the participation of women in this managerial set up was new and participation was low;
- social values had a lot to do with input.

She felt that the workload of women should be reduced and they should be involved in future training.

The participants had a brief discussion on the main points raised and then broke into working groups. The following are the reports of the working groups.

Group 1: Planning Strategies: Top-Down and Bottom-Up

Chair: Tsehaye Haile

Rapporteur: Nigat Mengesha

The group tried to define what was meant by Top-Down and Bottom-Up.

Top-Down - Plans were designed at the national level and issued down to the sectoral ministries and the people. Because they did not involve the people, because they did not consider the priorities, they were more likely to fail even if it had been a good plan. It did not include the two way exchange.

Bottom-Up - Plans were made at lower levels which considered priorities and needs. They were taken up the structure and reached the national level and incorporated in the national plan, after consideration of resources and the technical ministries, and the community for

implementation.

The Government of Ethiopia, since the establishment of the ONCCP, used a combination. Planning, sectoral ministries, mass organizations and the ONCCP were involved.

Women's participation was included in such planning, whether planning in water and sanitation, or other issues.

The group felt, however, that this participation differed from place to place. In some areas it was high, in some it was low. The group felt that there was need for the enhancement of the participation.

The following recommendations were made to enhance participation of women in planning WSS.

1) More recognition and acknowledgement of women's contribution in development planning and implementation.

2) Promoting attitudinal change through education and training, which would lead to the full participation of women.

3) Promoting awareness of the importance of clean water supply and sanitation.

4) Consultation and participation in decision-making regarding choice of technology.

5) Representation in development committees should be strengthened.

6) At the ministerial level, the establishment of the women's unit was felt to be important. It was also felt that the relationship between the unit and REWA should be close.

7) Strengthening REWA's relationship with the sectoral ministries should be promoted.

Group 2: Sanitation: are women the key to accelerating sanitation programmes? If so, how; and how can they make an impact?

Chairman: Hassen Ali

Repporteur: Nebiyu Eyassu

The group first defined sanitation as: removal of wastes; treatment of wastes; creation of healthy environment; construction of sewer systems, latrines, disposal pits, etc.

They then discussed aspects of sanitation and the role of women therein.

The consequences of problems of sanitation were identified as follows:

1) garbage disposal - the problem was that it attracted flies, rats, insects, etc. If not properly disposed of, medicine bottles, etc., might be hazardous, especially to children.

2) faecal disposal - brought contamination; diarrhea. Surface water might be contaminated and bring water-borne diseases.

3) animal waste - while not as hazardous or dangerous as the above, still caused or brought disease if not properly handled.

4) personal hygiene - could be problematic, especially if the house was not partitioned to separate humans from animals.

The group felt that women were indeed the key to accelerating sanitation programmes and that much progress had been observed at places where they were involved. If cultural barriers were overcome and other factors carefully considered in some ethnic groups, women's participation in sanitation programmes would be very helpful.

They then made the following recommendations:

1) Construction and proper area allocation of latrine pits in connection with water supply points;

2) Separate barns constructed for cattle, and separate rooms for cooking;

3) Education of women for sanitation;

4) Raise awareness of women about the hazards of improper disposal of garbage and faeces;

5) Involve women in development committees for sanitation;

6) Proper approach and training for women's involvement in sanitation, depending on local tradition;

7) Provision of training materials.

Group 3: 1. Low-cost Water Supply and Sanitation
2. Cost recovery

Chairman: Kebede Teshome

Rapporteur: Elizabeth Beyene

1. Regarding low-cost water supply, the group tried to investigate the economic and technical feasibility of various water supply schemes:

a) Gravity water supply schemes
b) Shallow wells
c) Roof water catchment

The group believed that among the various options considered, gravity water supply systems were the preferred ones, wherever topographical conditions permitted, since operation and maintenance was easier and costs were less, although the initial investment could be higher. In areas where the first option was not feasible, the group recommended that shallow well development and roof catchment be considered as the next options.

With regard to shallow well development, the group also discussed the types of devices which could be used to abstract water from wells.

After a thorough discussion, the group recommended that as far as possible, locally produced pumps should be utilized. One example was the BP-50 hand pump which had been tested and proved efficient for shallow wells. The Afri-Delf which had been tested in some parts of Kenya, and the Pail device, which had been tried in Burayu were among the ones which need to be encouraged, improved and widely used.

With respect to standardization of types of devices used for the abstraction of water from shallow wells, the group strongly recommended that the standardization of pumps and other devices be seriously considered so as to decrease the diversity of units used in different parts of the country, thereby reducing the diversity of parts required at different places for maintenance.

2. Regarding sanitation, the pertinent points raised by the group focussed on:

- Water collection
- Storage
- Usage
- Disposal

With regard to the above points, the group recomended that:

a) Sources of water should be kept clean and fenced.

b) Safe and clean water storage was a necessity. The traditional clay pots and cement plastered baskets used in some parts of rural areas were among the materials which could be easily produced at village level and should be encouraged in rural areas.

c) Individual pit-latrines should be encouraged in every household.

d) Health education should be given to the community starting from individual hygiene to environmental sanitation.

3. In discussing cost recovery, the issue raised was whether people should pay for the water they use.

The group believed that the community should be able to generate money to take care of operation and maintenance of the system, since this would develop a sense of ownership. However, in some rural areas the community could not afford to pay for the system. It was noted that the socio-economic conditions should be considered in making these decisions.

At last the group recomended that the community be made aware of the technology to be introduced and be trained to operate and maintain the systems.

4. As a general recommendation, the group felt that women's participation should be enhanced at every level, especially at the planning stage.

Group 4: Given the situation of Ethiopia, how can women be involved in the planning of WSS projects.

Chairman: Aster Berhane Selassie

Rapporteur: Tabotu Wolde Michael

To understand the main task of the group, different experiences were related out of which arose pertinent problems that stood in the way of women's involvement in WSS projects.

The main point emphasized was that women should be involved at every level of every project concerning WSS. Examples were cited where projects had been successful because of the involvement of women, e.g., the Dodota water project and where projects had not been so successful because women had not been involved.

The next point raised was why were women not involved? In the less successful projects, it was learnt that REWA had not been contacted to generate the participation of women, e.g., Awassa water project. From this the question of how REWA could be contacted at the grass-roots level was raised. Then REWA's structure and how it functioned from the national to the grass-roots level was briefly outlined.

The following problems were also discussed:

1) the problem of who was to be responsible for the whole project throughout;

2) the problem of co-ordination among the various agencies;

3) the problem of reaching women in remote areas for training, e.g., Bale's mobile training unit and mobile workshop;

4) the problem of community participation and making the community aware of the need for the involvement of women.

The following recommendations were then made:

1) REWA should be contacted at the planning stage.

2) One co-ordinating body, e.g., MOA, MOH, REWA, should be determined.

3) Training should be promoted to enhance the planning stage:

   a) training of experts, i.e., at the University level;

   b) recruitment of women for responsible posts;

   c) train men to assume responsibility in order to alleviate some of the workload from women, to enable them to participate in planning development projects particularly WSS projects.

4) Establish quotas, where possible, for the recruitment of women in all fields to enhance their opportunities.

5) Encourage exchange of experiences in various areas in the country.

6) Synthesize theory and practice, implement projects with all available resources - manpower, finances , etc. People charged with direct responsibility must be involved themselves in the feasibility study and planning - women being those chiefly responsible for water supply and sanitation.

The participants then met in plenary to discuss their findings.

Regarding sanitation, questions were raised regarding the construction of proper latrines and on training to raise the awareness of women. The issue of the use of VIP latrines in rural areas was raise, as well as the critical issue of the lack of availability of training materials in this area.

In discussing the issue of low cost water supply and sanitation and cost recovery the first question was with respect to a strategy to have some sectors of society pay for water service and some not. It was replied that government subsidy was sometimes inevitable. This question of government subsidy was pursued. It was asked if the NWRC, as a government agency, planned to increase its budget to construct free water supply centres or pumps throughout the country. It was learnt that the NWRC had not arrived at such a decision, but that its current policy was that water should not be free. It was believed that users should partially or fully cover the costs of operation and maintenance. However, provision of subsidy was inevitable in drought-affected areas.

Clarification was also asked as to the definition of cost recovery. It was explained that on one hand there was total cost recovery, which was believed to be too hard on the rural population. On the other, there was partial cost recovery, which meant cost of operation and maintenance only, or payment for the service the people received.

Another observation made was that in the development of low-cost schemes for WSS, training should never be overlooked. A question was raised by the same participants as to low-cost water supply schemes in areas where there was shortage of water. It was replied that collecting water from rain was specifically considered for dry areas.

Another participant asked if the individual household pit latrines that had been recommended were to be provided free. The reply was that the community should be involved in building latrines by using local material and request subsidies for costly building materials such as concrete slabs and cement.

A suggestion was made by another participant that one must be realistic and consider the country's level of development when suggesting the introduction of technology, and that education should be considered within the framework of the level of understanding.

Regarding planning strategies, clarification was asked for on "top-down" and "bottom-up" strategies. This was briefly explained and it was pointed out that a combination of both was becoming more popular nowadays. It was mentioned how planning was effected in Ethiopia at different levels and how projects were identified and priorities decided upon.

Another question raised was what was actually meant by participation of women and what were the incentives to make them participate effectively. It was replied that participation meant qualitative participation and the participation of women through REWA did not mean exclusion of their participation in other mass organizations or individually. It was added that their participation differed from place to place and if given the opportunity women would participate more fully.

In discussing the incorporation of women's participation in planning WSS projects, a question was raised regarding the need for a co-ordinator for WSS projects, and it was pointed out that this would be the function of NWRC.

With respect to the recommendation of a quota system, it was clarified that in the Ethiopian context where there was shortage of trained manpower - both men and women - the quota system was meant to apply in the education of women at various levels, including vocational training, and education to raise women's awareness to enhance the participation of women in development. It was added that the negative aspects of the quota system had also to be considered.

At the end a comment was made by a participant that in training teachers, the MOE encouraged girls and women if they had the necessary qualifications.

C. Module III: Involvement of women in choice of technology and implementation of water supply and sanitation projects

Module III: involvement of women in choice of technology and implementation of water supply and sanitation projects was presented by a panel of four people. They were: Mr. Kalidas Ray, Chief, Water Supply and Environmental Sanitation, UNICEF; Mr. Woldu Mehary, Head, Environmental Health Department, MOH; Mr. Tsehaye Haile, Head, Community Participation Service, WSSA; Mrs. Zewdie Abegaz, WID Programme Officer, UNICEF.

Mr. Ray has worked in Ethiopia for over seven years in rural water supply projects, first with the Ethiopian Water Resources Authority and then UNICEF. Prior to that, he spent over 25 years in West Bengal India, working in water supply and waste treatment.

Mr. Woldu is a Sanitary Engineer, with a great deal of experience in the field of health, particularly water supply and sanitation.

Mr. Tsehaye has worked for over 12 years in community development. He has contributed greatly toward initiating the idea of community participation in water supply planning, construction, operation and maintenance.

Ms. Zewdie has been with UNICEF for two years, before which she spent six years as project manager for the Integrated Family Life Education Project and three years with MOE.

In introducing Module III, Mr. Ray pointed out that so far, the traditional role of women had been that of primary water drawers, carriers and users. This limited view of the involvement of women had retarded progress in the water and sanitation sector. This shortfall could be attributed to the lack of involvement of women in planning, in implementation and in upkeep of water supply and sanitation systems.

The aim of the module being presented, he said, was to identify ways and means to involve women in the choice of technologies and implementation of WSS projects and thus accelerate the development of water supply and sanitation.

1. Specific Objectives

a) identify areas of intervention where women could be involved in choice of technology for acceptable WSS projects. This would form the beginning of the planning part.

b) identify ways of intervention for involving women in the activities of :

   i) implementation of water supply and sanitation projects

   ii) preventive maintenance and simple repair

c) identify training plans to prepare women for their appropriate involvement in the above activities.

2. Technologies for WSS Projects

Two approaches were identified:

a) Type: i) a protected spring; ii) a shallow well; iii) an expensive bore-hole; iv) or some other alternatives. For this, the least costly, the one of smallest scale (if there was a choice), and that which would be most easily accepted and adopted by the community, particularly the women, would be the choice.

b) Level of service: although most of the population in need of improved water supplies would have to be provided initially with low-cost solutions, e.g., shallow wells with hand pumps, upgrading of these systems might eventually follow by providing the sources with motorized pumps, and again further, with distribution systems, and yard or house connections as development progressed.

To exercise the technology option, the main criteria would be:

a) Health and sanitary appropriateness for adoption by the community under the prevailing conditions.

b) Functional appropriateness to suit the local attitude and expectation of the community.

c) Enviromental appropriateness which could be linked.

3. Choice of Technology

Although choice of technology was a variable of the local conditions, attitudes, beliefs and behavioural patterns of the community, improvement and development of WSS projects would necessitate mobilization of the society through health education and other viable means. For example, one shallow well with hand pump in working condition nearby a stream was rejected by the community; they were using stream water because they saw some foreign materials (cement and steel) being used in the well. As they did not know what these were, they rejected the protected sources. This was where other factors would play a major role in choice of technology.

In his presentation, Mr. Woldu went on to say that technology for WSS must be appropriate, i.e., acceptable, affordable and it must work. Pumps that breakdown often, need imported spare parts and latrines that are malodorous or inconvenient could not be used as intended. Many cultures related odour to diseases. He pointed out that, for instance, the word for disease in Amharic was Beshita which meant "by odour".

Women could not use latrines in Nicaragua beacause the door failed to conceal their feet. In another country the doors came to the ground and snakes nested inside, or because it was dark children would not use it.

In Zimbabwe and Northern Ethiopia mothers discouraged children from using latrines for fear of their safety. Women valued privacy, comfort, attractiveness, convenience, prestige, reliability and safety, in a way that men did not.

As users and caretakers of latrines, women's preferences and options should be considered. Their involvement ensured that women, and their children, could and would use the latrines.

Women could provide information on:

- Location of facilities
- Schedule for using facilities
- Design of technologies
- Cultural appropriateness

Women could provide valuable information on source of water and seasonal quantity variations. The examples in Surigao and Panama clearly illustrated the value of their participation.

Other facilities like laundary basins designed and constructed in Kuzistan, Iran, and Koladuba, Ethiopia, were abandoned because women in both places preferred the traditional squatting position when washing clothes. It was therefore deemed important to consult with women on design of facilities of which they were the users.

Women should be interviewed by women separately from men, so that they could express themselves more freely.

He noted that it had already been pointed out how much technology mattered. But both field observations and research suggested that the main obstacle in the use and maintenance of improved water and sanitation systems was not so much the quality of technology as the failure in qualified human resources and organization techniques including failure to capture community interest. More interest was given to construction due to the desire to serve as many people as possible in a short time. This limited community participation to more voluntary labour. Women, however, could do more as motivators of change and self-help.

To achieve greater or even total coverage, underserved communities should be helped to improve their water supply and sanitation conditions. National Women's Associations could help achieve Decade goals if planners made good use of them.

Completed systems were not always functioning systems. Non-functioning systems represented loss of investment and an obstacle to health and other benefits. Breakdown of water systems even for seven days a year could nullify whatever benefit was gained regarding the user's health. Women as users and managers of domestic water, could safeguard and maintain their water supply efficiently, if they were trained.

Records showed that women constituted a high proportion of the labour force in infrastructure works that provided food-for-work. Examples of women participating in voluntary labour in water and sanitation were abundant. But as they might be fully occupied in managing the household, they might have to give high priority to other obligations. Absence of child care provisions, and medical aid, and also lack of drinking water and latrines in working sites were indicated as problems by women workers.

Mr. Tsehaye then discussed women's participation in operation, maintenance and local management of rural water supply and sanitation projects.

He noted that rural water supply had been a priority of the Ethiopia development programme since the 1950's, but it was only recently that comprehensive steps had been taken to reappraise the huge problem of providing adequate water supply for rural areas. In the planning priorities, water resources development stood as the third most important activity after agriculture and industry. Effective involvement of the beneficiaries in water supply projects was also recognized as a key strategy for achieving the rural water supply objectives. The Water Supply and Sewerage Authority (WSSA) was empowered to implement urban and rural water supply programmes. Undertaking the repair and maintenance of improved water supplies, as well as sewerage services, was also under the jurisdiction of the Authority.

To ensure women's participation in operation and maintenance of WSS facilities, the following options were usually considered:

- making women aware of new information about how they could improve the quality of their lives and those of their families;

- understanding and accepting women's potential contribution to the effectiveness of improved WSS services;

- consulting with community members and women's groups so that women's needs and choices could be identified;

- ensuring that conscious efforts were made among socio-economic surveyors, planners and administrators to seek out women's views regarding projects;

- starting pilot projects in areas where women's role was already acknowledged.

Until recently, rural women played a minor role in the repair and maintenance of WSS facilities. Several constraints contributed to this problem, among which the following were the major ones:

- the general powerlessness of rural women;

- socio-cultural barriers - socio-culturally, women themselves were not homogeneous. They were rich and poor, powerful and powerless, articulate and silent;

- lack of strong organization to sustain women's participation;

- stereotyped sex roles resulting from sexual division of labour;

- lack of consultation and involvement at plan formulation, resulting from characteristic conceptual gap between people and planners.

Since the revolution in 1974, the role of Ethiopian women both as home managers as well as a potential force in development had become more pronounced. Before the revolution, women were under-represented in government institutions and invisible in the development process. Today the opportunity existed for women to use rural services that could make their lives easier as well as provide skills and knowledge. Women had organized their associations from the local level to the national level. In addition to their household tasks, rural women in many parts of Ethiopia were working side by side with their male counterparts on environmental sanitation, reafforestation, co-operative farms and other rural development activities, including water supply development.

Although women as members of the benefiting community or as individual groups had participated in the construction of water supply schemes, there was no systematic operation and maintenance to involve them. Over the last three years, WSSA had, however, introduced a three-tier maintenance system where beneficiaries, especially women, could play a significant role.

At the first level, community level maintenance, preventive maintenance as well as site management were carried out by the users. A local water committee, democratically elected by the users, was responsible for the overall supervision of the water point. Such a committee consisted of at least two women. Pump operators, trained on basic pump maintenance as well as general aspects of water points site management were selected from among the users. Although pump operators' training was considerably dominated by male trainees, users were always encouraged to nominate female pump operators. Female extension agents were also trained and deployed in the fields.

At the second and third levels, maintenance was conducted by a mobile maintenance crew and central regional workshops respectively.

Health education was an important aspect of water supply and sanitation. Cognizant of the long term advantages of women's involvement in site management of water supply projects, WSSA strongly supported the promotion of health education. Prevention of water contamination between collection and consumption was the main objective of the water or health education component of WSSA.

Ms. Zewdie focussed mainly on the training component related to the involvement of women in choice of technology and implementation of water supply and sanitation projects.

She queried who could be responsible for water systems and offered the following suggestions:

1) women's organizations;
2) that it could be a joint venture; or
3) a business undertaking, e.g., a kiosk.

She went on to discuss the training content for water committees and specified the following areas that needed to be included: supervision and organization of operation; maintenance and repair; finance; accounts and bookkeeping; hygiene and health education; and communication.

With regard to approaches to involve women she felt that it should begin with small-scale projects and action research. Field manuals should be developed from field experience and were acceptable at programme planning and policy levels.

Field agents should find out from the women what their needs and expectations were and integrate both men and women at all levels and stages of the project.

In selecting field workers, she felt that women field workers were preferable. They had easier and more effective communication with and cooperation from other women.

Young, unmarried girls with a higher level of education should be approached as they were generally more mobile with less constraints such as children for which they had to care.

Other issues to consider, in training, she noted before closing, were:

1) could the circumstances of the training be adapted;

2) could training courses be decentralized to the village level;

3) were child care facilities provided at training centres;

4) was training employment-oriented;

5) was self-confidence being achieved in training;

6) in joint training with men and women were women being allowed to take the lead in order to gain confidence.

In closing, Ms. Zewdie stressed the need to identify problems when and where they arose and to communicate progress in order to raise morale and generate interest.

During the brief discussion that followed the presentations, two main issues were focused on by the participants. These were: the issue of responsibility for the water system and consultation with women before selecting or implementing any technology.

The participants met next in working groups. The following are their reports.

Group 1: What should be the involvement of women in choice and transfer of technology, how should women be involved; what are the constraints.

Chairman: Adenetik Kidanemariam

Rapporteur: Yelfign Worku

Before the group discussed technology they identified sources of water as: rivers, wells, springs, lakes, ponds, rainwater.

1) Technology

a) River:

- infiltration gallery
- treat water by conventional means
- sedimentation, filtration, chlorination

b) Wells:

- shallow well - by hand
- deepwell - by drilling machine
- protect by covering
- disinfect
- improve water-lifting devices/hygiene
- pumps

c) Springs:

- fencing
- cleaning
- building concrete or water tight containers

d) Lakes:

- treating water from lakes

e) Ponds:

- fencing
- dig wells nearby so that it can infiltrate
- when a pond is formed it could be done with concrete

f) Rainwater:

- through roof catchment
- water tank built to catch rain water

2. How to involve women

a) find out what they already know; observe and then see what is appropriate and what preferences exist

b) awareness; education; organization (e.g., REWA)

3. Transfer of Technology - technolgy should not only include technical know-how, but also discussion; in so doing what should be done may be determined

   a) do they want a place for washing
   b) are there springs around
   c) who should educate
   d) co-ordination
   e) channel of communication
   f) organization
   g) mobilization

4. Sanitation - includes environmental and household sanitation

   a) personal hygiene
   b) housekeeping
   c) food and water sanitation

5. Constraints

   a) socio-cultural barriers
   b) lack of exposure to education
   c) heavy workloads at home
   d) lack of facilities
   e) lack of service (such as day care centers)
   f) lack of time and energy

Group 2: What are the existing criteria, policy and regulation for selection and transfer of technology; recommend policy development to facilitate women's involvement in selection and transfer of technology

Chairman: Etalem Mengistu

Rapporteur: Gabre - Emanuel Teka

The group was not in a position to determine existing criteria, policy and regulations for selection and transfer of technology, but felt that the government agency responsible should be:

1) National Water Resources Commission
   a) EWWCA
   b) WSSA

2) Office of the National Committee for Central Planning

3) Ethiopian Science and Technology Commission

4) Ethiopian Standards Institute

If such criteria, policy and regulations did not exist, the group recommended that the basis for establishing them should include:

a) cost of the technology
b) appropriateness of the technology to the locality where it was expected to be transferred
c) simplicity of the technology for operation, repair and replaceability under local conditions

The above points also called for standardization and for creating a clearing house for such technology.

Regarding policy development to facilitate women's involvement in selection and transfer of technology, the group recommended:

1) Conscious effort should be made to train women at all levels of the project.

2) Before introduction of a new technology, the prevailing socio-cultural aspects regarding WSS should be studied. For this, women should be given a prominent role. Communication of women could yield better results.

3) Continuous motivation of women for interest and positive contribution for the community should be encouraged.

4) Opportunities should be given to women to learn from other areas where women were contributing positively, visits to exemplary places, etc.

In considering how to involve women in the choice of technology, the group recommended the following:

1) First the general condition of the community should be observed and the way the community utilized the water resources. Based on observations, choices in new technology should be presented.

2) The new technology should be introduced to the community at large and women in particular by:

   - creating awareness as to the objective of the new technology;

   - training of the new technology through film, posters and demonstration of different types of pumps.

3) The new technology introduced should be simple and manageable by the community, with a multi-purpose use.

4) Control and co-ordination should be carried out by NWRC of all the various government and non-governmental organizations connected with water development.

5) The Arba Minch Water Technology Institute should encourage the participation of women in its research programme.

6) Co-ordinating committees should be established at national, regional,local levels.

Group 3: What are the considerations of appropriateness when installing new technologies; suggest means for more effective participation of women in WSS projects

The group identified the following points to consider in the appropriateness of new technology:

- affordable

- easy to maintain and operate

- sustainable: using locally manufactured equipment in order to avoid problems of spare parts, to reduce complexity of maintenance, etc.

- suitable to the geology and physiography of the area, and to the local cultural background

- appropriate technology should also include improved water collecting and transporting material such as cement jars, etc.

Some new technologies practiced in Ethiopia were highlighted. These were:

- gravity schemes

- low cost hand pumps such as Afri. Dev. pumps - the advantage of these pumps was that they needed very few tools to maintain them and were very simple to maintain.

It was pointed out that new technology was new to the whole rural community, not only to the women:

- training of the community as a whole was essential

- training should focus on the primary users (women)

- women should be exposed to WSS projects from the very beginning of the project. This helped in minimizing problems of maintenance, operation and management generally, after the phase out of the project

The practical example mentioned was the training of women in Bale region. Twenty-three women underwent practical training, on-site, on maintenance of locally manufactured hand pumps. Before the training, a manual was prepared. Maintenance was carried out because the training had been effective and successful.

The primary users (women) should be consulted during the choice of technology. This had two-way advantages. Not only do they receive instruction, but instructors glean information from them.

In this respect, a certain example was mentioned from the southern part of Ethiopia. Clean water was provided by a shallow well, but at the nearby community center the spring was considered to be holy water. The community continued to use the spring rather than the well. This sort of problem could have been be avoided had there been women involved in the choice of technology.

The women's training programme should also incorporate a simple and proper explanation on the difference between the traditional system and the new technolgy and its advantages.

There could be difficulty involving the community, and in particular the women, in WSS projects from the initial planning stage throughout operation and maintenance. To achieve effective involvement one must review the financial, material and manpower resources problem.

In this respect, two divisions could be made:

(1) villages that do not have any water source at all

- easy to teach and achieve effective involvement

(2) villages that had alternative, traditional water sources

- difficult to coordinate and achieve the objectives.

This problem could be solved by an appropriate approach to the community and particularly the women. Some alternative approaches were through peasant associations, women' associations, youth associations or village elders. In general, since the primary users were women, the approach should be through women's associations. The women could have, and provide, good and constructive ideas if they were approached through their associations.

Regarding sanitation, not much was being done in rural areas. Recently VIP latrines were tried and constructed.

Concerning latrines, it was found that:

- proper choice should be made on the type of laterine to be introduced to a particular community;

- it should be easy to construct;

- location and size of holes, type of superstructure should be according to the preference of the community and particularly to the women;

- as in water supply, education and training of women was essential, since it was they who were responsible for upkeep.

Sanitation was not only waste disposal, but also included personal hygiene:

- in any water supply scheme, wash basins (for clothes) should be provided;

- if the situation permitted, provision of showers should be made.

When the expenses for these facilities was compared with the cost of a water supply scheme, it was minimal. As much as possible, for the above mentioned facilities, local materials for construction should be used.

Recommendations:

1. Appropriate choice of technology should partly depend on the geological, geographical and local cultural background of the area.

2. Appropriate new technology should be tested through pilot projects.

3. The research and experiment centre of the NWRC, which dealt mainly with WSS, should be strengthened.

4. Involvement of women in the choice of technology was essential.

5. Approach to the users, usually women, should be through women's associations.

6. Proper choice should be made on the type of latrines and the associated super structure according to the local situation (as to size of holes and type of construction materials, ease of cleaning and maintenance, etc.).

7. Wash basins, and if possible, provision of public showers should be incorporated in any water supply schemes.

8. Information on WSS should be disseminated to all concerned organizations.

Group 4: Suggest training programmes for women to operate, maintain and repair WSS systems; suggest income generation opportunities for women while participating in simple repairs and maintenance of WSS systems

Chairman: Mr. Tedla Zeyohannes

Rapporteur: Mr. Tekka Gebru

Before making suggestions/recommendations on the issues of the topic, the group sought information on experiences locally or from other countries. In this regard, experiences came from Dodota, from Bahrdar, Arbaminch, and from Nepal.

The Dodota Water Supply was a gravity fed system implemented with the assistance of SIDA. The system supplied water to 17 villages and three towns, to a total of 13,000 people. The training included 114 women for one month and later 18 women for two months on more technical and administrative issues issues in running the system. The latter group of trainees became the employees of the system. The training was on administration, technical management and bookkeeping. The water supply system was now self-sufficient with respect to repair and maintenance, installation of new pipelines, collection of revenue and bookkeeping.

Other experiences were also briefly shared and finally the group decided to make recommendations on the above two topics.

1) Training of women

a) Use the existing local structure as a force and tool to select women for training. At the grassroot level, REWA could be used for this work.

b) Trainees should include both girls and middle aged women, but they would have to be literate and preferably from the project community.

c) Training should be done, if feasible, in situ. For this purpose a mobile training team (composed of technical, socio-economic, administrative and accounting expertise) should be established.

d) The services of the line ministries such as MOE, MOA, MOH and NWRC should be integrated to develop child care, nutrition, horticulture, sanitation etc. Until integration or coordination at higher levels is attained, expertise locally available could be drawn from to provide training for women. For this purpose , the directors of local schools should enhance the education component, the extension agent should enhance the development of horticulture; the peasant health agent should promote health and sanitation. This could be integrated by and with the services of the nearest WSSA branch office personnel. Such a group could be made a training group.

e) Prepare a comprehensive training curriculum that is suitable to the educational level of the women and matches with technical particularities of the specific system. The curriculum could include:

(i) Administration - routine operation of the system

(ii) Bookkeeping - accounting, purchasing and storage of

materials

(iii) Technical skills - basic knowledge of water (quality and quantity); agents of pollution; protection of sources; prevention of contamination in collection, storage, transportation and use of water; knowledge of the system - location and specifications of the source, the pipeline, the reservoir and the distribution system.

(iv) Plumbing-pipes: types and their sizes, fittings and uses; common problems in the system - how to identify failures and correct them; preliminary knowledge of measurements - volume, length, weight, etc., and the basic tools in repair and maintenance and how to use them; knowledge on the use of and differences between such materials - steel, plastics, wood, etc.; practical application of routine maintenance procedures such as fuel, oil, grease, etc.

Along with the provision of the above training, it was suggested that the women be provided with clear, simple and appropriate manuals.

f) All training should be repeated, revised or refreshed as often as possible and there should be close follow-up on the performance of the trainees by the training group.

2) Income generation

The group expressed a general conviction that:

"WSS systems managed by women often function longer and render better service to the community than those left to other groups."

Therefore, women assigned in operating and maintaining WSS systems should be incentivized and/or compensated. Three ways of generating income to remunerate the women were:

a) Employment of women on a regular income-earning basis could be encouraged. The payment for this operation could be remitted by one of the following systems;

(i) Specific rate per volume of water used, for example as in Dodota (five cents per jar)

(ii) flat rate per month per household. This rate could be determined after a thorough socio-economic study made of the community.

(iii) metered payment - where meters are installed the rates would have to be comparable to those applied in urban areas.

b) If the income to be generated must be strictly connected to the water supply, the group suggested the development of horticulture with the available extra water from the system.

c) Other income-generating schemes, developed with subsidies or assistance obtained through outside agents, which could be successfully managed by women were noted to be: grinding mills, poultry raising, cattle priming, cooperative shops, recreation centers or that which was being carried out by the Dodota women's group - biogas development and weaving training.

In the general discussion that followed the reports of the working groups, two main points raised were the question of training material and the problem of coordination. It was learnt that there were many pamphlets and manuals in English on transfer of technology and which, if desired, could be made available for translation. This was most welcome since the group had not considered training material.

On the question of coordination, it was felt that resources should be considered when assigning a certain body to coordinate activities. It was emphasized that the main coordinating committee should be the most active implementing body. It was also with the NGO's. Working out some sort of coordinating mechanism was felt to be an important factor.

A comment was made that not only should systems be explained to people, but that they should also be made to understand that the problem was theirs, the project theirs, and that success depended on what they did and how they did it.

Another comment was that although much time was spent on the engineering and technical aspect of technology, there was a need to consider the problen of women carrying water for long distances. Technological provisions for transportation needs were thus felt to be a necessity.

One question raised was how far one could go in involving women in technology - how would their preferences be handled - in a technical decision. The reply to this was that there was no limit and that it was a question of education.

It was also noted that the technical choice depended on geographical and geological conditions and that through education on technology, women could accept the technology, but that there was no need for women to know every technical aspect. They could be given alternatives for them to make a choice.

Here it was believed by one participant that there were two opposing views on this issue. But then it was agreed that the two ideas were parallel; water technology aspects might be too detailed for women, but at the same time, they should be involved in areas where a sense of ownership could be fostered.

One participant drew attention to the need to spell out clearly the relationship between water and sanitation, reminding the plenary that the purpose of the Decade was both water and sanitation. With regard to the Dodota Water Supply project, the same participant pointed out that the question of sanitation had not been addressed in the project. He also noted that sweeping generalizations and recommendations to have only women in other projects as was the case in Dodota project, should be avoided.

It was suggested that Dodota be taken as a prototype. It was also suggested that the recommendation that water should be handled by women be taken as a credo leading to more activity such as Dodota.

A comment was also made that the group had touched on very important issues and that suggestions had also been made concerning coordination. This example of who should coordinate and how, should be followed for other modules. Coordination was believed to be a burning issue especially at the grass roots level.

A participant then pointed out that there should be two divisions in training. Although a mobile training team was suggested, due to shortage of time and financial constraints, it was difficult to make it practical. Therefore, it was deemed inevitable that people would have to be brought to training centres, especially considering the diverse technical equipment needed for the workshops.

D. Module IV: Role of women in education and training activities for water supply and sanitation

Module IV, role of women in education and training activities for water supply and sanitation, was presented by Ms. Mary Tadesse, Chief, African Training and Research Centre for Women, ECA; Mr. Woldu Mehari, Head, Environmental Health Department. MOH; Ms. Alasebu G. Selassie, Women in Development consultant; and Ms. Zewdie Abegaz, Women in Development Programme Officer, UNICEF.

In her introduction of the Module, Ms. Mary began by saying that in Africa, women were predominantly farmers. They produced 80% of Africa's food and bore 90% of Africa's water.

Despite their vital role in the economy of the region, their health situation was precarious. They had too many, too close, too early and too late pregnancies - the major cause of maternal, infant and childhood mortality and morbidity.

The greatest threat, she said, to women's health was ignorance and the best remedy was education - the subject of this module. The module discussed the extent that women had been involved in water supply and sanitation training programmes. It made it clear that neither at village level in local maintenance or management, nor at higher levels in programme management and engineering had they been adequately involved. Throughout the module the importance of socio-cultural factors was discussed.

What were their needs in training? What was their potential? This needed to be addressed, she said.

Training women as trainers

Here a number of questions were raised by the presenter. The point was made that training women as trainers on the sites where facilities were being constructed was advisable. The specific problems associated with interviewing techniques, problem of selection for training programmes and teaching materials were discussed. She felt that many ideas discussed were also applicable to any training programme for women in any subject.

Action at the national level

Many useful ideas were presented in the module to guide governments in working a training programme in WSS. She felt that one could see easily that the advice was based on experience of working with women. Special measures that must be taken when women were considered had been presented in the module.

She raised the issue of positive discrimination and wondered if it were not appropriate at all times.

The perennial problem of time to learn was raised. In parts of Zambia and Ethiopia, women worked as much as 16 hours a day. In Rwanda they failed to attend nutrition and home economics training because they had no time to learn.

The question and importance of traditional know-how in health matters, the relationship between technical projects and health, and the place of health education in formal education had also been touched upon.

In closing, she said she found the module to be pertinent. She noted finally the importance of the role of communication, information and literacy in this area.

In his presentation, Mr. Woldu pointed out that the major health problem in developing countries was caused by communicable diseases that were directly or indirectly linked to water and sanitation. Recent global estimates by WHO indicated that these diseases which accounted for 80% of all diseases in developing countries claimed no less than 50,000 lives every day, and about 20,000 of the victims were children. Besides this daily catastrophe, these diseases crippled many people and as a result, millions of working days were lost everyday in developing countries.

Inadequate facilities for excreta disposal greatly contributed to the transmission of these disease. The potential benefit of water supply facilities was reduced if sanitation facilities for excreta disposal were not provided. Studies showed that the sanitation sector was not usually given the same importance as water supply. In rural areas sanitation tended to be viewed as an urgent need only after water supply was considered satisfactory.

Health education

More attention should be paid to women when planning health education. Some important questions, like why were facilities needed, what was needed to make these facilities function properly, how were they maintained, etc., should be discussed with women.

Usually health education was restricted to telling women that they "must" or "should" change their behaviour. However, they first needed access to resources necessary for making these changes, for example, soap as well as water to develop hand-washing habits.

Main constraints and local hygiene improvements

Health education was emphasized to promote the desired use of WSS facilities. Women as primary users of these facilities were the main target group for health education. The constraints that hindered their participation in health education needed special consideration.

Time to learn

Inconvenient time and place might prevent women from attending meetings. Provision of childcare facilities encouraged women to attend programmes. For example, in Vietnam, the provision of creches enabled women to participate in economic work in group discussions on hygiene and family planning and also to help in the health centers.

Participation of women in group discussions was effective in changing health conditions and behaviour, while one-way transfer of information, as in lectures directed to individuals were found to be less effective in achieving behavioral change. For example, during the cholera outbreak in 1970 people were being advised to boil their drinking water until it was found that they were drinking hot water and had problems giving it to the young.

Radio programmes reached women at home while busy with their domestic work. It was found that it was extremely useful as a medium, particularly in remote rural areas. The rural people's tendency to give credibility to whatever was said over the radio could be an additional advantage.

Building on local knowledge and resources

Health education programmes should have direct relevance to people's lives. Lack of direct relevance was often the major obstacle that prevented women from participating or attending health education programmes. Telling women to boil their drinking water when it was clear that there was a fuel shortage or preaching hand washing with soap as good hygiene practice when soap was not available or very expensive was irrelevant. Health education programmes consisting of "must" and "must not" were deemed ineffective.

Women through their daily experience and observations had acquired basic knowledge on which participatory programmes could build. Household surveys conducted in nine countries showed that most women had some basic knowledge of various water- and sanitation-related diseases. Women's knowledge, and the gaps and misunderstandings that existed, would become more clear through in-depth discussions.

Linkage of health education with technical projects

The absence of policies, guidelines and orientation of middle-level officials on intersectoral cooperation between departments with technical and socio-educational tasks complicated integration. In India, health education had been integrated into some water supply projects. But since this was done at the request of the donor, subsequent water supply projects by the department failed to follow suit. Such experience highlighted the need to incorporate policy.

Formal Education

Children, he pointed out, were the generation of the future. They could be agents of change. Girls assisted their mothers in fetching water and taking care of their younger brothers and sisters. Twenty-nine out of 86 countries that participated in surveys conducted in connection with mid-term evaluation of IDWSSD, reported that primary school children received health education.

However, various methods and effects of health education were not measured. In some places, e.g., Sri Lanka and India, academic information on the cause and transmission of diseases was given. In other countries, e.g., Paraguay, more practical programmes were carried out, with the involvement of children in the improvement of their schools and communitites.

In schools where many students were gathered in one place, the risk of disease transmission was quite high. It was therefore necessary that hygiene be understood and practiced regularly. Adequate latrines and proper maintenance arrangements were also needed.

In closing, Mr. Woldu said that participatory health education programmes should not be limited to mothers only but include joint identification of all local risks and the planning and implementation of comprehensive action programmes.

Ms. Alasebu, in her presentation, pointed out approaches to education and training.

The first approach, she said, focused on supporting training endeavours at the national and local levels, including developing guidelines for women's participation to be used by government, international organizations, NGOs, women's organizations, etc.

The second, she said, called for responding to requests for short-term advice to various communities, to assist in training activities, which included seminars and workshops in WSS.

The third approach involved the review of existing educational and training materials, making sure that women's issues were taken into account. This should result in the production of special materials on health care and WSS activities, portraying the multiple role of women.

The fourth and last approach emphasized the gravity of fellowships and arranging visits and study tours to successful projects, to study how women's involvement had improved the effectiveness of WSS.

She noted that socio-cultural factors that impeded women's participation were based on the status of women in that society. Selection of criteria for training WSS should give women special opportunities, as women had no access to information about WSS projects and/or training. Provision should be made for training leading to gainful employment.

To ensure effective participation of women in WSS, selection of women should include women of different categories. Local women knew who represented their interests most. Their choices should be followed. WSS approaches should be appropriate to the style of life of the women concerned.

Women in segregated societies should get WSS education at the site, along with auxiliary services which were necessary to women.

In closing, she raised the question of how many projects like Dodota would be operating by the year 1991, or even by the year 2000. Would the measures suggested by the module be realized in Ethiopia? What national strategies would be devised that would lead to universal participation of women in WSS activities? To this effect, she expressed the hope that at least the participants of this particular seminar would be convinced that women were the only group that could make WSS a reality.

In her presentation, Ms. Zewdie began by saying that the importance of promoting training for women in water supply and sanitation must be firmly emphasized because:

1. Women were the main collectors of water.

2. Women were the main decision makers about water , such as source, containers and usage; and about maintenance of water points and surrounding up-keep.

3. Women were the most concerned and motivated and felt the gain from improved water and sanitation, e.g., distance, weight, health, time, workload.

4. Women were the most knowledgeable about multiple uses of water, e.g., drinking, cooking, washing, hygiene for children, themselves, family, animals, and water for gardens.

5. Water supply was one of the best entry points for larger development issues and self-help where women could get involved easily.

She then noted the problems of training women as trainers:

1. There was a shortage of women trainers.

2. The linkage between teaching and training techniques to suitable field experience was lacking.

3. Training was not well planned.

In planning training for women in WSS, she emphasized that the socio-cultural aspect must be considered and solutions must be provided, e.g., venue, child care, length of training, proper and detailed information, and schedule of training activities.

Training should be comprehensible by the trainees, e.g., water for health, hand pump maintenance and operation, identifying breakdowns of water systems, personal hygiene, sanitation in the community and around the water point, simple technology, involvement in site management, collection of fees, selection of water system caretakers, and water committee data collection and evaluation. Women trainers should be trained on the site where facilities were being constructed, operated and maintained.

She identified some important considerations in training women as trainers:

- how should women be selected (selection criteria);
- what proportion of the content should be technical and what proportion methodological;
- where should the training take place;
- to what extent can self-learning materials develop to help training skills.

Regarding the role of WSS staff in training and supervising women's training, the staff must perceive training as part of their task; they must develop and devise mechanisms to ensure that women who receive training begin as soon as possible to train others; and WSS must develop a built-in supervision system.

Women as trainers ranged from graduates to illiterates. They varied in age, education, occupation, social background, etc. The types of tasks to be performed would determine the number and types of women to be trained.

Training women for intermediate and lower level tasks, such as sanitarians, sanitation and public health inspectors, health and sanitation aids, community development workers, water works operators, volunteers, and community health agents should be given due emphasis.

Ms . Zewdie concluded by saying that formal and informal education programmes must provide motivation and education on safe drinking water and sanitation. WSS projects must penetrate educational institutions and programmes. Programmes should be designed to be of direct operational relevance to the task to be performed.

The discussion was then opened for comments from the participants.

Some of the points raised were the problems of socio-cultural barriers that hindered men from sharing the work of women and how this problem could be solved slowly by educating men and women. In connection with this, the importance of change in attitudes of both women and men was mentioned.

The important role mass media played in disseminating information and education on health, agriculture, water, etc., was also mentioned.

The importance of choosing a conducive time and place to teach and train women was also stressed.

A point was also raised which asked the participants to highlight sanitation and to discuss who should be the responsible body for this programme of the Decade in order for the Decade to be successful.

The participants then broke into four working groups.

Group 1: Why is it important to have women as trainers and trainees of WSS projects and how can their involvement be enhanced

Chairman: Messele Mingesha

Rapporteur: Tesfaye Eshete

In dealing with this topic the group members exchanged their ideas and views on the importance of having women trainers and trainees for WSS projects. The group underlined the concept that the purpose of training was for the formation of a new person with new attitudes, new skills and understanding. The group also pointed out that since the problem of rural development was a problem of communication, to make development really possible the concept of development should be clear to all levels of workers engaged in the implementation of rural development projects. In this respect, the group felt the need to train different categories of people for WSS projects. In the brief discussion, the group noted the need to train high level trainers but because of time limit, the group restricted itself to dealing with the specific topic.

In the discussion, the first question raised was why should the trainees in WSS projects be only women?

In discussing this point, the group felt that since women were the primary users in water supply and sanitation projects they were the appropriate category of people to be trained for WSS projects. The group also supported the idea of having women trainers in WSS projects since a women trainer among women trainees would be perceived as 'one of us' in the group. This created a conducive atmosphere in the training programme by facilitating two-way communication.

The group also cited some examples from Module III as to why women in rural communities were not willing to use pit-latrines that were not compatible with their traditional practices. In this respect, the group suggested that in the training programme for WSS projects emphasis should be given to attitudinal change. The group also discussed the possibility of using male trainers to train women trainers, where enough women trainers were not available.

The group then made the following recommendations.

1. Establishment of a trainers training centre.

2. The use of mass media in community education.

3. A clear-cut policy to encourage the training of women.

Group 2: Recommend ways and means to include education, training and information for women at national and community levels

Chairman: Gabre-Emanuel Teka

Rapporteur: Rachel Makuria

The group first discussed the present state of education, training and information.

Education and training

Education before training was considered important, because to train people first they should be educated; a certain level of education was necessary.

- General education should be given first and then,

- Specific education for certain services afterwards.

At present, education and training in Ethiopia did not focus on women as such, at the national level or the community level. Programmes were not prepared or organized with women in mind. In formal education, there was only home economics.

In the literacy programme, sanitation/health/hygiene was taught, but not only for women; it was for both men and women. At the community level, better basic development education was given. There was no positive discrimination to have more women in education and training. The group felt that training should be task-oriented, to be able to accomplish a specific job.

The educational system in the lowlands where most people were nomads should have a different approach it was felt, if it were to benefit the majority, including women. Regarding women's training in general and tendencies for a career, typing, nursing, birth attendance, etc., was being carried out mostly by women. This was a result of the socio-cultural situation and not positive discrimination, as such.

At the university, especially the faculty of technology, the girls that joined were very few, compared to boys. There was no positive discrimination of gender in admission to the university.

The educational system it was felt should be devised in such a way that vocational education be given emphasis.

Health training

MOH was giving priority to women in health training. There existed positive discrimination.

In the water sector again there was a kind of policy or positive discrimination to include women on water committees at different levels, training women technicians and engineers. Involvement of women in the water sector in connection with education and training was encouraging in the rural areas. But in the urban areas, women were not prepared to take certain training that had been done by men mostly. Attitudinal change was also necessary; little was being done to bring this about.

Information and education through the mass media

It was not considered necessary to dwell on television and newspaper

media. Radio was deemed the only true mass medium in Ethiopia and in Africa. Because it had the capacity to transcend the barriers of distance and illiteracy; and it was easier to own a radio in terms of cost and power to operate.

There existed in Ethiopia a number of educational programmes but with little consideration of women and their needs, given in a broader sense, and not with particular consideration to women.

They were also found to be less than successful because:

- time to reach the audience was not studied;
- regional stations were too few;
- it was propaganda-oriented and not educational.

The educational mass medium was doing a commendable job in radio education, by using eleven regional radio transition stations in the language of the area.

Co-ordination

Co-ordination of mass media and development agencies was considered important. Educational mass media of MOE and MOI were not working closely, for example.

The production quality of educational programmes should be improved. It should be rich in demonstration and experimentation. It should not be only information or propaganda-oriented.

Recommendations

1. Audience surveys should be carried out (opinion and observation).
2. Skilled people should be used who know the subject matter and how to present it.
3. A listeners' forum to get feedback should be created.
4. The mass organizations should also be used for feedback.
5. Co-ordination and collaboration of the different ministries and development agencies with the mass media should be promoted; particularly, the people concerned with education and information should collaborate more effectively.
6. Attitudinal change should be promoted to enhance education of women in the different sectors.

7. The educational system for the highlands and lowlands should be different to fit the objectives and situations in the respective areas.

Group 3: In planning training for women, what are some of the socio-cultural aspects which need consideration. How can this be addressed.

Chairman: Getachew Makuria

Rapporteur: Nebiyu Eyassu

In considering the above topic, the group began by sharing experiences and looking at studies already made. The Dodota project and the Melka Wabe project were explained. Through these, and other ideas expressed, the following points were raised:

1. The training was best conducted in the project area. This should be planned wherever possible.

2. In selecting candidates, age, marital status and family responsibilities should be considered during the planning.

3. Cultural, traditional and social obligations must be discussed, such as funerals, weddings, religious holidays, etc., as women must be made aware of difficulties caused because of too much concern for such activities.

4. The social acceptance of the women to be trained must be considered in making the selection. This was necessary to make sure that the trained individual's training ability was accepted afterwards.

5. The man-woman relationship had to be considered. The case of the Hammar people of Gamo Gofa, was cited. This was only one of the many tribes where women were considered to be property. Even in urban areas, women trained at high levels were not allowed to use their studies. This needed very strong attitudinal change.

6. The trainers themselves must have good awareness of the socio-cultural situation to be effective teachers.

7. Positive cultural situations were mentioned. It was at traditional meetings that women discussed their problems. REWA's forum could and was being used for giving informal training, and included inviting resource persons.

8. When planning training the purpose must be stated clearly. It had to be able to raise the woman's awareness. The planning must consider her time factor.

9. To make it possible to attend the training, women must be provided with support services, like kindergartens, grinding mills, etc.

Recommendations

1. Socio-cultural attitudinal change had to be tackled by the family, formal school and at non-formal training. Mass media could also play a very important role in creating awareness.

2. When feasibility studies were being done, not only the technical study, but also the socio-cultural aspect of the community must be studied with simple questionnaires.

Group 4: Do women have equal access to training courses as men? If yes, has the training encouraged involvement of women in WSS programmes. If no, describe why not. Make recommendations in this regard

Chairman: Philip F. W. Bartle

Rapporteur: Melkam Tesfe Beyene

After exchange of opinion, the group reached a general consensus that women did not have equal access to training, even where supported by law.

The group discussed the different ways in which women were kept from training programmes, in the home, the school, the work place, etc.

1. In the home

a) The girl's responsibilities started from early ages. She was engaged in various household chores while boys were not. This meant the home situation did not allow girls to go to school.

b) Lack of day-care centers also prevented the girl from going to school as she had to tend younger children.

c) When there was a choice, boys got the preference and priority to go to school.

d) Early marriages also hampered girls from going to school.

e) The attitude of people that girls should get protection while going to far-away schools, also prevented them from going to school.

2. At the school

a) The group noted that at every level of the educational system there was a lower proportion of girls than boys. The reasons put forth in this connection were, again: early marriage, household responsibilities, such as fetching water, firewood, etc.

b) Prevailing attitudes existed relegating girls to particular subjects, such as sewing, while mathematics and technical subjects were for boys.

c) The social reaction in most cases was that pregnant girls were discouraged in one way or another from pursuing their education; but boys who became fathers were not discouraged.

d) The group in general agreed that there was a bias against allowing girls in technical fields.

3. In the Work Place

The group felt that there was a preference at work to employ and give promotions to men rather than women.

The group then discussed the involvement of women in WSS programmes. It was felt that beside a few exceptions, women were discouraged from training in the field of WSS. Because of the general socio-economic attitude, girls were made to believe that they could not compete or perform equally with men.

After discussing the above points the group made the following recommendations:

1. The advantages and disadvantages of creating separate training programmes for women were raised. However, the group believed that girls should be enrolled in the same technical courses along with boys, i.e., coeducational courses.

2. Since the radio had great influence on people, this particular medium, especially through adult education and literacy courses, should be made to educate the public on the role of the whole family in an effort to bring about attitudinal changes. The group believed that radio programming should take into serious consideration the fact that it was to the benefit of society in general, and the family in particular, to educate and enlighten girls and women. The group recommended that radio programmes be directed to the majority of the people and that programme content should appeal to the interest of the majority.

3. In general, it should be the responsibility of all to educate the public with respect to changing attitudes. There was in existence conducive fora, from grass root to the national level, i.e., REWA, PAs, DAs which should be further strengthened.

4. Labour-saving and appropriate technologies that were time saving should be encouraged to lighten the burden of women.

5. Day-care centres should be expanded.

6. Other income generating activities that helped women secure income should be encouraged.

7. Early marriage should be discouraged so that girls attend schools.

8. The NWRC should give equal opportunity for further training.

9. Water supply projects should be expanded further through the cooperation of the government and donor agencies, in order to decrease the burden of girls in order to allow them to attend school.

10. REWA, within its capacity, should further enhance the participation of women in training and create income generating projects through cooperation with development organizations.

In general the group agreed that:

11. A link between EWWCA, WSSA and REWA should be created or strengthened.

12. According to the experience of the Dodota project, there was no reason why women should not participate in any training programme - so efforts had to be made in this regard.

13. Careful monitoring of implementation of WSS projects had to be continually emphasized, i.e., there were government policies that were not being translated into action.

14. Family planning programmes should be extended to the rural areas so that girls or women would be knowledgeable about the services, and benefit from them.

The participants then met in plenary to discuss the findings of the groups.

The first comment was on the importance of positive discrimination. It was suggested that organizations like REWA should find out about the existence of conscious and unconscious biases about women. On the other hand, women should be supported morally and materially in education and training. INSTRAW could play a role, and after education, women should also be given positions.

Clarification of positive discrimination was given, which should be seen only as remedial for the present situation and not something to depend on forever.

On the question of education of highlanders and lowlanders, it was felt by one participant that education should serve all segments of society, but this should be balanced with the national interest. As the issue was a delicate one, it was suggested that this refer only to water supply and sanitation.

This issue was further clarified by a member of the group who stated that differences in cultural backgrounds, sedentary and nomadic communities, and specific needs should be taken into consideration when devising educational systems.

Relating to the Dodota Water Supply Project, a question was asked as to how the gap was filled when the women were away for two weeks for training. It was replied that, first of all, careful selection was made not to include women with very young children. It was arranged that relatives and members of REWA would help those who were left behind. Men had willingly taken up more responsibilities, realizing the necessity of the training for the benefit of the society.

The project of Hiruta was also cited as exemplary in educating and raising the consciousness of men before any training.

It was also recommended that mass organizations all over Ethiopia should be approached by ministries involved in WSS relevant information before the planning stage.

Information was asked regarding WSSA's involvement in sanitation by the Chairman of the group and it was replied that WSSA had strong links with sectoral ministries and promoted education in the safe use of water and horticulture.

Bringing up the importance of education of six year-old girls specifically and their burden in carrying water, a participant called for appropriate technology to improve water carriers and ease the burden of girls and women.

The participant stated that the organization she represented, the Family Development Project, would be very happy to assist in this initiative.

It was suggested that community promoters of WSS should be taught about family planning education and services. It was also stated that undue standards of education should not be created that would thus keep women out of development activities.

Finally the following points were made:

1. attitudinal problems could be overcome if the economic gain of training women was emphasized;

2. ways and means should be explored to facilitate education of girls;

3. the alarming problem of teenage pregnancies should be given attention and solutions should be thought out;

4. girls' interest should be promoted in technical subjects and mathematics from an early age in school;

5. the role of women's organizations like REWA should be redefined.

E. Module V: Evaluation of water supply and sanitation projects

Module V, evaluation of water supply and sanitation projects, was co-ordinated by Ms. Ruth E. Abraham, Assistant Programme Officer, UNDP,

and presented by a panel of four: Ms. Daphne Casey, Assistant Resident Representative, UNDP; Ms. Aster Berhane Selassie, Executive Committee Member, REWA; Ms. Almaz Eshete, Assistant Professor of Psychology and Education, Addis Ababa University; Mr. Aberra Mekonnen, Head, Research Unit, Planning and External Relations, MOE.

Ms. Ruth had been with UNDP since April 1987 and served as the focal point for WID in UNDP, Addis Ababa.

Ms. Casey was Assistant Resident Representative in Addis Ababa since 1985, following assignments in Zambia and Angola. She was responsible for monitoring UNDP-supported programmes in the agriculture and water sectors.

Ms. Aster had been an Executive Committee member of REWA for the last seven years. She had 10 years experience as a management expert at the Ethiopian Management Institute.

Ms. Almaz was with the Faculty of Education, Addis Ababa University (AAU), since 1961. She had worked extensively with the Ministry of Education, Ministry of Labour and Social Affairs and Family Guidance Association of Ethiopia, in programmes related to the education and training of women and children's services.

Mr. Aberra had lead the International Development Research Centre - sponsored National Literacy Campaign Evaluation Project; had been involved in the Swedish International Development Agency - sponsored research project entitled, "Effects of Primary Schooling on a Rural Community"; and had been involved in an educational disparity study of the Keffa region in conjunction with UNESCO and UNICEF.

In her presentation, Ms. Casey felt that the introduction in Module I paid tribute to the achievement of the IDWSSD to date, but recognized that women would have to be given a higher and more active profile in the planning, design and implementation of WSS projects if the remaining goals of the Decade were to be achieved or if the best climate was to be created for the eventual realization of these aims.

Evaluation was seen as an important tool for reviewing past actions, identifying short-comings and problems highlighting valuable lessons (practices and methodologies capable of being replicated) and for making recommendations. All evaluation, if properly conducted, should provide policy-makers and decision-makers with useful and constructive information for deciding on the future of any project or action.

Therefore, for the findings of an evaluation to be a useful input to decision-making, the evaluation itself should be properly planned and executed. Its timing should be scheduled at appropriate periods in the

project life (thus timing should be foreseen at the time of project formulation, with funding provided); terms of reference should be clear and specific, the composition of the team should be appropriate in terms of qualifications and experience; the duration should be sufficient to allow for contact with all parties involved in the project, i.e., from the planning stage to the beneficiary level. The report of the mission, which should be issued within a reasonably short space of time, should make clear recommendations and indicate or again make recommendations assigning follow-up responsibility. As much as possible, evidence to support claims made in the report should give an approximate time frame for addressing the problem areas identified in a project.

It was also stated that evaluations were helpful in providing guidelines to all parties involved in a project. At the policy level, its findings could help orient decisions on new or similar projects and provide a useful input for resource allocation. At the design stage, it could be valuable for identifying those considerations which individual communities wished to be included, thus reducing the likelihood that the completed project would not be easily accepted. It was submitted that these findings could also help at the construction and operation stages.

In addition, donors or other participants in the project could have clearer identification of the roles foreseen for them, since these would be based on the local realities of available materials, personnel and other relevant issues, which should let them know what contributions were expected and how this would be meshed with the local contribution for implementation of the project.

The participants were urged to review the module with the above considerations in mind, and to determine if as formulated it would allow for a useful assessment of the role of women in WSS projects. Finally, if there were modifications they wished to make, based on their own experiences, these should be made known to INSTRAW, with appropriate recommendations for amendments.

In her presentation, Ms. Aster first discussed the purpose of evaluation.

Purpose of Evaluation

Definition:

> Evaluation is a systematic way of learning, by experience and examination, to find achievements and/or short-comings of activities.

She noted that in a project what was evaluated was the project organization, operation impact and policy issues; and said that the reasons for evaluation were:

a) to get feedback
b) to improve the project
c) to take corrective action
d) to discover new avenues for different activity

She pointed out that the module indicated three components of evaluation:

a) technical
b) administrative
c) impact

In conducting the evaluation any one or a combination of the following methods could be used:

a) household sample survey or stratified survey
b) observation
c) questionnaire
d) oral interview

Relating the module to the situation in Ethiopia, very brief highlights of the condition of Ethiopian women as compared to the situation that existed pre-1974 revolution, were presented.

General evaluation results of why the Dodota water project became successful were presented as:

a) scientific and objective feasibility study done before decision
b) genuine, expert effort of contractors
c) genuine, expert advice of consultants
d) strict follow-up and guidance of the regional party committee
e) the undivided attention of regional governmental bodies
f) co-operation and assistance of the mass organization
g) expert assistance of ONCCP
h) the co-ordinating role of REWA - conscious effort by regional, provincial, district and local REWA offices with the women

Regarding data analysis in the process of breaking grouping, logical sequencing and differentiation of key issues was explained.

Priority ranking was recommended but the indicators were given as feasibility impact and cost.

Parts of a good evaluation report were mentioned to be:

a) introduction
b) statements of facts, data
c) analysis of data
d) recommendations
e) proposed action plan
f) appendix
g) executive summary

Here clarity, accuracy, persuasiveness, attending to the requirements (political, economic, social) and timeliness were emphasized. The importance of presenting the positive and negative side of the findings was indicated.

Follow-up action

The value of sending evaluation results to all concerned, and explanation to the local people, was stressed.

Methodology

The advantage of external evaluation was pointed out to be:

a) expert design
b) better data collection
c) analysis
d) storage

the advantage of evaluation by local people was indicated as it was given in the module.

Stages of evaluation were indicated to be:

a) Water production stage - functioning
b) Operation stage - utilization
c) Impact stage - effects on health, economy and social condition.

The two aspects of WSS evaluation were mentioned to be:

a) impact of women on WSS project - by comparing a situation where all the staff were women, with the results found when all the project staff were men; and

b) impact of WSS project on women - was measured by assessing the results in economy, skills acquired, time saved, energy and health conserved.

Ms. Almaz, in her presentation, noted that the document "Minimum Evaluation Procedures" (MEP), was prepared by WHO for the IDWSSD. It outlined a step-by-step procedure for evaluation of WSS Projects. It presented indicators for the evaluation of functioning and utilization facilities. It did not, however, include impact evaluation, on the assumption that this was more complex and costly and required the involvement of research institutions, rather than government agencies responsible for WSS programmes. However, documented experiences from impact evaluation studies were presented in summary form.

The guidelines were written for global application, she noted, and it was suggested that they be adapted to local conditions bearing in mind the purpose of the evaluation, institutional arrangements and technologies employed in the project to be evaluated.

MEP followed the three-step system: functioning, utilization and impact. At each level MEP suggested indicators to be looked for and data - gathering techniques, including sample questionnaires.

MEP described step-by-step procedures for evaluation, starting with the initial decision to evaluate, through planning stages, collection and assessment of data, preparations of recommendations, and follow-up actions.

The MEP appeared to include all the essential and key components of evaluation. It was simply written and could be used in the Ethiopian context with little modification. The development of similar evaluation procedure to assess women's involvement in planning, choice of technology and training, with relevant indicators would be most desirable.

Mr. Aberra related to the participants an experience in evaluation research.

Abomsa water supply project

Abomsa was a town in Arssi region. The community in the town had been suffering from water-borne diseases. With major financial help from UNICEF, a pipe system was installed three years ago. The evaluation experience presented was based on this project.

The project had the following major objectives:

- the installation of a pipe system for the provision of safe and adequate water supply;

- the involvement of women in the running of the system;

- the creation of income generating and development activities using the income from the sale of water that would specifically benefit women and children.

The objective of the evaluation was to examine the effects of the project on the community.

Since there was no baseline survey done prior to the installation of the pipeline, the evaluation had no point of departure or data with which to compare. It was considered worthwhile to note that such a survey was important whenever a development project was implemented.

Research Methodology

The approach followed was to enumerate the major activities that had to be accomplished in order to meet each of the major objectives.

Example: The installation of the pipe system included two major activities, training of women technicians and installation of the pipe.
These two enquiry areas related to the first objective could be classified under the title project operation.
Within the two enquiry areas, indicators or key variables were identified and paralleled to each indicator, the specific questions, the type of instrument and the source of the information were identified.

The second major objective, the involvement of women in running the system, could be classified under project performance. This concerned financial and personnel management, maintenance of the system, distribution of water, etc.

In the impact part, health, social and cultural (attitude formation, beliefs, awareness, etc.) were the enquiry areas.

The evaluation was more of a qualitative nature. Quantitative data was collected concerning incidence of water-related diseases, income from sale of water, distance travelled to fetch water and water consumption. Qualitative data was based on the opinion of those involved in running the project and the community on problems, benefits of the system, social and cultural effects like the development of scientific outlook, equality of the sexes, etc.

Important findings

1. The women proved that they could run the system. They showed that they had acquired the technical skills and used the skills efficiently to solve problems under very odd situations.

2. The domain of effect was more pronounced, i.e., women's involvement in all aspects of the work and especially in the technical part created a marked change in community's attitude towards the question of sex equality. One could say that the psychological and moral uplift of the women could be one of the major effects of the project.

3. There was no educational component attached to the project. A good percentage of the community, for example, used the river water for bathing and cleaning which was contrary to the knowledge that bilharzia was caused by contaminated water, which the river was.

4. The project had no formative evaluation mechanism. When a project was an expensive one such as this, a built-in, follow-up mechanism becomes important. A summative evaluation after a number of years would reveal unsolved problems rather than strengths. Such an evaluation may be considered a fault-finding exercise by the implementors of the project. If a formative evaluation mechanism were built-in, problems would be solved in time.

Points to consider in evaluation

1. In conducting an impact evaluation, it was deemed important to involve the community and those involved in running the project, especially in the identification of key indicators, design of instruments with respect to language relevance, understandability, simplicity, etc., and administration.

   Coming to the water supply project, it was possible that it would result in impact on health, but it alone could not result in an increase in income. As in the module, the impact evaluation should not only look on health and economic benefits but more so on characteristics that show and prove women's ability and competence to manage such projects by themselves.

2. Select evaluators from the research area if possible. Selection criteria could be the following:

   a) Evaluators must know the background of the project to be evaluated.

   b) Evaluators should understand the objectives of the evaluation.

c) They should know why each item in the instruments was included. If an item was perceived differently by different indicators, then the data collected could be of little value.

d) The social relationship and communication skills of evaluators were very important factors. An evaluator perceived as authoritative or under suspicion got in most cases, positive responses emanating from fear, but no reality.

e) Careful sampling was very important. This was based on carefully selecting the sampling factors which were supposed to make a difference negatively or positively on the implementation of the project.

In conclusion, Mr. Aberra pointed out that impact evaluation was the process of collecting, analyzing and interpreting evidence to judge or estimate the effects or consequences of a development project on the life of the individual, the family and the community.

Sequence of outcomes:

- Acquisition of knowledge, skill leads to
- Internalizing knowledge, skill leads to
- Awareness, attitude formation, leads to
- Application of knowledge, skill lead to
  (depends on resource)

- Change in life (cultural / economic / psychological)

In the general discussion that followed, a question addressed to the NWRC was, what the proper time frame was for evaluation of a project when determining the evaluation component of a project.

The answer given was that there was no formulated guideline to do such project evaluation, but it was said that in some assisted projects such as UNICEF-assisted projects, evaluations were done given terms of reference. For this, examples were given on evaluations made in 1982 and 1985. However, these evaluations had not been able to measure the positive and negative impact, and other relevant information needed to be found after evaluation. This was because baseline surveys were not made before the implementation of the projects. This point, i.e., doing baseline surveys before project implementation was recommended to be carried out in any WSS programmes.

On the other hand, it was pointed out that national level performance evaluation was done on a quarterly basis.

The other questions raised were, what the co-ordination and collaboration mechanism REWA used was in the Dodota water project, which had made this project so successful; and how could this mechanism be used for other projects?

The answer for this was that a steering committee composed of REWA, NWRC, ONCCP, local government, local REWA, and others took up the responsibility and made constant monitoring of the project possible. This coordination and collaboration was said to have been the major factor for the project's success.

The participants then met in working groups. Their reports follow.

Group 1: Assess MEP, suggest improvements; indicate parameters that would recognize and integrate women's concerns and enhance women's involvement in the evaluation of WSS projects

Chairman: Debebe H. Yohannes

Rapporteur: Nebiyu Eyassu

The group first discussed the following points:

1) objective or purpose of evaluating;

2) procedures of evaluation, steps, components;

3) MEP: relatively inexpensive, simple and quick;

4) suggestions for improvements of evaluation procedures;

5) how to enhance the role of women in evaluation.

Definition of MEP

The group agreed that MEP was a systematic way of learning from experience and of using the lessons learned both to impact the planning of future projects, and also to take corrective actions to improve the functioning and utilization of existing projects.

1) Procedure of evaluation - steps to be taken and evaluation techniques

- decision to evaluate
- selection of persons for evaluation
- establishing terms of reference
- desk study

- field visit
- focus of evaluation
- data collection
- assessment of data
- preparation of recommendations
- review of the report
- follow up action

2) Assessing MEP as relatively inexpensive, simple and quick method

- it would not take more than three or four days at the site for evaluation
- it evaluated the functioning and utilization only
- it did not evaluate the impact
- it evaluated simple technologies
- its objectives were simple

The group discussed costs of evaluation and had different opinions. At last they agreed not to give too much weight to cost.

3) Evaluation to enhance the role of women

- ask their opinion (women users should be contacted)

- the evaluating team should include women

- the women working in the evaluating team should be skilled both in evaluation and have good knowledge of the project or similar projects

- indicating parameters that would recognize women's concern, the evaluation should include women and identify their concerns

- The evaluation should underline the fact that by doing something constructive, the involvement of women in a project and its success brought satisfaction and recognition by society

- The evaluation should make recommendations for new action to meet women's concerns resulting from the construction of the WSS system

The evaluation should not be kept only as a document but used to help improve the existing situation in functioning and utilization. The evaluation team should recommend to the highest authorities that action be taken in short time.

Recommendations

The group, agreed to record that some members felt that the issue of cost, i.e., whether the process was relatively inexpensive, should not be given as much weight as the claims for simplicity and quickness, since the size and complexity of a given project would have an impact on the cost of evaluation, even in cases where only two aspects, functioning and utilization, were at issue.

1. The terms of reference of the evaluation should clearly specify that women in the given community should be interviewed during the field visit segment of the evaluation process. For this purpose, the duration of the mission should be sufficient to allow time for meeting the women.

2. The evaluation should specifically focus, in its discussions on women, on identifying concerns or interests of women related to the installation of WSS facilities in their communities.

3. The evaluation should highlight where no attempt was made to focus on women as users and decision makers vis á vis the utilization of WSS facilities; and conclusions resulting from this shortcoming should, where possible, form part of the evaluation report.

4. Where women had been involved in a project, the impact of their action should be assessed in the evaluation report, in addition to recommendations of other lessons learnt.

5. The evaluation team should include women members, and they should be trained in evaluation techniques as well.

6. The introduction of WSS facilities into a community will have certain immediate and noticeable effects for women in a community (time and energy saved, economic costs, e.g., paying for the water, etc.). The evaluation team should make recommendations for related complementary action needed to maximize the benefits to the community of such projects, whether they be skills training, health education, etc.

7. The evaluation should give an indicative time frame for initial action to address the issues raised so that the momentum or awareness raised in the community from one WSS installation would carry over.

8. The findings and recommendations of the evaluation should be made available to the community and a mechanism should be introduced or an established system used to ensure feedback to higher-level authorities, so that they may be taken into account in final decisions on the specific WSS activity.

9. The group felt that women in the community should be involved not only in the actual evaluation (as interviewers as well as interviewees), but that they should also participate in pre- and post-evaluation activities of the evaluation process. As such,(a) an attempt should be made to identify their concerns prior to the actual evaluation, and these should be reflected in the terms of reference of the evaluation; and (b) women should be members of the community group given the responsibility for implementing the accepted follow-up recommendations of the evaluation.

Group 2: In what ways can WSS projects improve the situation of women, their families and communities. Which participation methods and levels of participation of WSS projects will bring about the most benefit to women.

The procedure established by the group was to enumerate benefits derived from current projects to women. Accordingly, the following were enumerated:

A. Dodota project

1. Women used to spend five to six hours a day to fetch water, and still did not have enough water in their homes. After the implementation of the project there was enough water in the homes and the women saved time.

2. Women operating the water project were salaried and got income for their families.

3. Vegetable gardens were started.

4. Participation of women in the producers' co-operatives was enhanced and their income increased.

5. Some activities and services were started, e.g., day care centres, schools, recreational activities.

6. In turn, the establishment of day care centres permitted the women to participate in producers' co-operatives.

7. Health conditions in the community improved. Prior to the project many children and babies were dying from water-borne diseases but this situation had altered since the implementation of the project.

8. Nutrition had improved because of vegetable growing and cleanliness.

B. Family Development Project (FADEP)

1. Projects of FADEP were started at the request of the peasant's associations. In most cases their requests were concerned with water supply. The participation of women in these projects varied from place to place.

2. It was foreseen that in future water projects, attempts would be made to involve women although this might not be easy in many parts of Ethiopia.

3) Women, although not involved in the planning and managing of water projects, were the main beneficiaries from the results of the water projects.

C. Abomsa

The project was started and implemented in collaboration with the Urban Dwellers Assocation (UDA).

1. Women received the project well, and the trainees were salaried employees in the project. As a result they had time and money and were attending classes.

2. Because the women were successful in operating the water project, the men had changed their attitudes towards the women.

3. The people had developed a more scientific outlook.

4. There was no base-line data, but the clinic reported that the incidence of water-borne diseases had decreased.

On shortcomings of the project, it was pointed out that there was no follow-up and no co-ordination between the women's association and UDA.

It was also pointed out by the group, though, that projects like Dodota and Abomsa were comparatively large projects and could not be taken as typical examples. Most of the water projects in the country were small. In most of these projects there was not much by way of income generating activity. Most of the benefits derived from the project for women were indirect. In many cases the time saved from a water project was not used.

Recommendation

The group recommended that to determine if a WSS project had improved the situation of women, their families and communities, the evaluation procedure must focus on the income generating activities and the decision-making power the women acquired. The income generating activities could be very numerous depending on the initiative and industriousness of the people working with the women's groups. Similarly, the type and method of participation of women in projects must be right from the very inception of the projects. In order to have women participate effectively in WSS projects and in the development of their communities' education it was absolutely essential that evaluation of women's participation be made an essential component of the project.

The sanitation part of the topic was not discussed sufficiently due to shortage of time, but the role of education in this was strongly emphasized.

Group 3: Does the evaluation mechanism in your organization have a management information system which allows monitoring of its effects on women. If yes, please specify. If no, indicate what should be done and how such a mechanism should be structured.

Chairman: Mr. Tedla Zeyohannes

Rapporteur: Ms. Elizabeth Beyene

First to have a clear idea of the existing evaluation mechanism systems of each organization, each group member explained the existing mechanism of his respective organization. They then discussed thoroughly the inclusion of women in their evaluation systems.

The group found out that some organizations incorporated women's issues as a component of their programmes (e.g., MOE and MOH) and had incorporated a monitoring and evaluation system on the effects of the programme on women. But in those organizations where they did not have components in their programme to address women's needs, they also did not have a monitoring system that evaluated the effects of their programmes on women.

Hence, regarding the question of how to structure such a mechanism, the group recommended the following points to be taken into account by government and other organizations.

Recommendations

1. Each organization should establish an information system on women and their needs through conducting a base line study (survey) first on the situation of women.

2. All WSS projects and programmes should contain a women's component so that the evaluation mechanism would allow monitoring of its effects on women. And the programme and projects of WSS should be more specific about women.

3. Organizations should encourage and give more opportunities for the recruitment and training of women, adopting a positive discrimination policy in favour of women.

4. Planners including ONCCP should be sensitized to women's issues and such sensitization programmes should be provided through workshops and seminars at national, regional and grass-root levels.

5. Donor agencies should facilitate these workshops and seminars by giving the necessary financial support.

6. Existing evaluation mechanisms in all organizations should be strengthened by incorporating women's issues at every stage.

7. Donor agencies should give more support to programmes that foster the involvement of women in WSS. Then the programmes devised would be acceptable and useful.

8. Since the effect of a programme did not have the same impact on both men and women, specific monitoring systems should be designed to address the needs of both groups.

Group 4: What criteria and indicators should you use for evaluating women's impact on WSS, and also the effects of WSS on women?

Chairman: Gabre - Emanuel Teka

Rapporteur: Yelfign Worku

The group first defined criteria as the facilitating factors, and indicators as: factors that point out the appropriate course of action.

In order to look at the objective, show the behavioural outcomes and activities, target population, expected outcome is clarified. So, clearly stating objectives was very important. From the objectives one may move on to the indicators.

Criteria and indicators on the impact of women on the project

1. How were they handling the taps, this indicated how they detected faults, and how they took care of them.

2. Were the women aware of the important impact that the water projects had on their lives.

3. What was the time factor used to fetch water.

4. What were the hygienic aspects that would come before or after the project.

5. What improvement in life style would the women gain from this project.

Bearing in mind women's participation, projects had greater chances for success. If women were not involved, the project might suffer, because it was women who knew the capacity of the source, sites, distribution, water points.

The group highlighted the following points:

1. Indicators

In the planning stage:

a) Did the plan envisage the participation of women.

b) Did the plan include sensitization of women.

c) Were there any attitudes that prevented people from using the water project.

d) Was there proper co-ordination and awareness.

e) Were people involved.

2. Functioning

To what extent was it functioning.

3. Utilization

a) Was it utilized properly - the number of people using the system.

b) Was it utilized properly - the number of households using improved water storage.

4. Health aspect

To what extent had health education been practical. Was there change in behaviour.

5. Economic aspect

a) Did it catalyze other projects.

b) Was the water used for horticulture.

c) Was there redistribution.

6. Comparative study

To know the impact women have on a project, a comparative study was needed.

a) Degree of supervision
b) Functionality
c) Frequency of breakdown
d) Timely reporting and proper utilization

7. General indicators

a) Were the projects evaluated systematically and consequently.

b) Did the women's organization have funds which could be channelled to WSS projects.

c) Did the women's organization act as a forum to communicate and educate.

8. Impact of the project on women

a) Did women use the time saved on productive activity.

b) Did the health condition of women improve.

c) Did the project help for safe delivery.

d) Did maternal and pregnancy complications decrease.

e) Did the number of girls enrolled in school increase.

f) Were mothers using MCH programmes.

g) Were they participating in other public affairs.

The participants then met in plenary for general discussion.

The first point raised was to emphasize that there were emergency situations in constructing water supply in some places in which case there was no time to consult the community as a whole and women in general. But there was a reminder that, whatever the case may be the most important point was that water points had to be used.

A suggestion was made that what was needed was more women engineers and technicians involved in planning. It was suggested that more opportunities should be given to them for training and quotas made for their enrollment in technical schools or institutes. Here the Dean of the Arba Minch Institute of Water Technology informed the plenary that women were encouraged as long as they fulfilled the academic requirements and that there were 16 women technicians who had graduated from the Institute. It was also learnt that there were 20 Ethiopian women engineers presently studying in India.

It was also pointed out by one participant that the purpose of training women was: 1) to educate them; and 2) to assure their participation in the project especially at the planning level.

A question raised was for more information on how a monitoring and evaluation system could be built into an organization.

It was stated that the system depended on the nature of the programmes and the built-in system of the Ministry of Health in areas such as pre-natal care was cited as an example.

Another request was for detailed information on evaluation for workshops and seminars to be organized on national, regional and district levels. In reply, the group stated that it recommended that short seminars and workshops be given for planning groups to make them aware of women's problems especially as regarded WSS projects. The group added that whatever the programme, it should be evaluated vis-a-vis the impact on women's participation. There was, it was added, need to sensitize people at the head office in Addis Ababa, but most importantly, the people at the grass-root level.

A question was raised as to whether it was education or communication that played a major role. The reply given to this was that the message was education and the channel was communication; and so both played a major role.

Because of a request for information on the Abomsa water project for the benefit of the plenary, a participant representing UNICEF, directly involved in the Abomsa water project gave a detailed account of the project.

Regarding the point of educating women, a participant emphasized that education should not be used to hinder women from involvement in other activities. Education, it was stated, should be given for both men and women and that education also took place through the process of involvement.

Attention was called by a participant to the fact that there was need for evaluation to consider the benefits to children, particularly girls, as well.

Another participant emphasized the importance of including women in the evaluation team and examples were cited to prove the importance of this point.

It was also stressed that monitoring and evaluation were part of the planning system and that the job of planners was to make sure there was a procedure for evaluation from the beginning. It was also pointed out that a good evaluation should improve the monitoring system developed at the beginning.

ANNEX I

List of Participants

1. Aberra Tullu
   Regional Head
   Central Region, Nazereth
   Water Supply and Sewerage Authority
   National Water Resources Commission

2. Adanetik Kidanemariam
   Director of Community Health
   Faculty of Medicine
   Addis Ababa University

3. Alemu Bekele
   Head, Eastern Regional Office, Dire Dawa
   Water Supply and Sewerage Authority
   National Water Resources Commission

4. Almaz Eshete
   Assistant Professor
   Addis Ababa University

5. Aster Mulugeta
   Chairperson, Arssi REWA
   Assela
   Revolutionary Ethiopian Women's Association

6. Aster B. Selassie
   Management Expert
   Ethiopian Management Institute

7. Atsede Wondimageynehu
   Assistant Chairman
   Health Research Council
   Ethiopian Science and Technology Commission

8. Ayalnesh Makonnen
   Assistant Expert
   Ministry of Health

9. Ayalech Kidane
   Head of Skill Development and Social Affairs
   Arssi REWA Council
   Assela
   Revolutionary Ethiopian Women's Association

10. Belete Lakew
    Lecturer
    Faculty of Technology
    Addis Ababa University

11. Daniel Gebrewolde
    Senior Expert
    Office of the State Committee
      for Foreign Economic Relations

12. Elizabeth Beyene
    Assistant Planning Expert
    National Water Resources Commission

13. Endalkachen Getaneh
    Junior Expert
    Office of the National Committee for
      Central Planning

14. G. Yohannes Hagos
    Regional Manager, Combolcha
    Ethiopian Water Works Construction Authority
    National Water Resources Commission

15. Gabre-Emanuel Teka
    Associate Professor
    Faculty of Medicine
    Addis Ababa University

16. Getachew Makuria
    Head, Basic Development Education
    Adult Education Department
    Ministry of Education

17. Hassen Ali
    Assistant Dean
    Arbaminch Water Technology Institute

18. Kassahun Deneke
    Demographer
    Central Statistical Office

19. Kebede Teshome
    Regional Manager
    Central Regional Office
    Ethiopian Water Works Construction Authority
    National Water Resources Commission

20. Kebkabe Tafesse
    Head, Rural Women's Affairs Division
    Ministry of Agriculture

21. Manayeh Mengesha
    Head, Southern Regional Office
    Awassa
    Water Supply and Sewerage Authority
    National Water Resources Commission

22. Melkam Tesfa Beyen
    Reporter
    Ministry of Information

23. Messele Mengesha
    Regional Manager
    Northeastern Regional Office
    Combolcha
    Urban Water and Sewerage Authority
    National Water Resources Commission

24. Mitkinsh Teklu
    Community Development Worker
    Ministry of Labour and Social Affairs

25. Nebiyu Eyassu
Ministry of Information

26. Negash Awoke
Regional Manager
Eastern Region, Dire Dawa
Ethiopian Water Works Construction Authority
National Water Resources Commission

27. Nigat Mengesha
Head of Foreign Relations Service of REWA
Revolutionary Ethiopia Women's Association

28. Rachel Makuria
Head, Television Division
Department of Educational Mass Media
Ministry of Education

29. Sahle Sisay
Regional Manager
Awassa
Ethiopian Water Works Construction Authority
National Water Resources Commission

30. Seble Mekonnen
Head, Family and Child Section
Ministry of Labour and Social Affairs.

31. Tabotu Wolde Michael
Programme Director
The Voice of Ethiopia
Ministry of Information

32. Tadesse Kebede
Head, Planning and Programming Service
Ethiopian Water Works Construction Authority
National Water Resources Commission

33. Tafessech Urge
Head, Home Economic Section
Relief and Rehabilitation Commission

34. Tebeyin Tesfaw
Expert, Planning and Programming Office
Ministry of Health

35. Tedla Zeyohannes
Senior Expert of Project Preparationn
Ministry of Education

36. Teferi Taye
Research and Development Engineer
Ethiopian Water Works Construction Authority
National Water Resources Commission

37. Tesfa Mariam Tekie
Acting Coordinator, Multi-Sectoral Unit
Office of the National Committee for Central Planning

38. Tesfaye Eshete
Head, Public Relations Services
National Water Resources Commission

39. Teshaye Haile
Head, Community Participation Services
Water Supply and Sewerage Authority
National Water Resources Commission

40. Woldu Mahary
Head, Enviromental Health Department
Ministry of Health

41. Yelfign Worku
Head, Home Economic Panel
Curriculum Department
Ministry of Education

ANNEX II

List of Observers

United Nations Specialized Agencies and Organizations

Food and Agriculture Organization
Etalem Mengestu, Assistant Programme Officer

World Bank
Egbert H. J. Schroten, Planning Engineer

World Health Organization
Ingela Berggren Palma, Physician

United Nations Capital Development Fund
Thomas Hansson, Field Implementation Officer

United Nations Children's Fund
1. Zewdie Abegaz, Programme Officer, Women in Development
2. Kalidas Ray, Chief, Water Supply

United Nations Economic Commission for Africa
1. K. A. Edwards, Chief, Water Resources Unit
2. Mary Tadesse, Chief, African Training and Research Centre for Women

United Nations Development Programme
1. Ruth E. Abraham, Assistant Programme Officer
2. Daphne Casey, Assistant Resident Representative
3. Gerard King, Deputy Resident Representative

United Nations Fund for Population Activities
Mulugojjam Assaye, Programme Officer

Governments

Italy
Paola Zampillo, Health Education and Training Officer, Italian Embassy

Bi-lateral Agencies

Canadian International Development Agency
Philip F. W. Bartle, Community Participation Advisor

Non-Governmental and Other Organizations and Agencies

Agri-Service Ethiopia
1. Telahoun Haile, Director

2. Lebesech Tsega, Assistant Head, Teaching Materials Development and Production Division

Ethiopian Evangelical Church Mekane Yesus
Afewerk Bairu, Head, Water Development Programme

Family Development Project (formerly Integrated Family Life Education)
1. Mariette van de Loo, Advisor

2. Tewabech W. Selassie

Lutheran World Federation/World Service
Debebe Habte-Yohannes, Assistant Director of International Relations

National Children's Commission
Zenebworke Berhane, Senior Nutrition Expert

Norwegian Church Aid
1. Terefe W. Agegnehu, Health Officer

2. Tekka Gebru, Coordinator, Water Development and Engineering

OXFAM
1. Elizabeth Abraham, Local Community Project Officer

2. Ann Muir, Gender Training Officer

Save the Children Federation
Tadesse Belachew, Coordinator, Water Supply Programme

News Agencies

Radio France Internationale and
Voice of Ethiopia
Getachew Tedla, Senior Journalist

ANNEX III

WOMEN, WATER SUPPLY AND SANITATION
- a national training seminar -
Addis Ababa, 23 - 28 November 1987

Agenda

1. Opening of the seminar
2. Election of officers
3. Adoption of the agenda and programme of work
4. Module I: Introduction to the International Drinking Water Supply and Sanitation Decade and the United Nations International Research and Training Institute for the Advancement of Women
5. Module II: Participation of women in planning water supply and sanitation projects
6. Module III: Involvement of women in choice of technology and implementation of water supply and sanitation projects
7. Module IV: Role of women in education and training activities for water supply and sanitation
8. Module V: Evaluation of water supply and sanitation projects
9. Adoption of the report
10. Closing of seminar