and the International Drinking Water Supply and Sanitation Decade

submitted to THE WORLD CONFERENCE TO REVIEW AND APPRAISE - ACHIEVEMENTS OF THE UNITED NATIONS DECADE FOR WOME

ared in accordance th the decision of



The Inter-Agency
Bok Force on Women
and the
DWSSD

by





The United Nations
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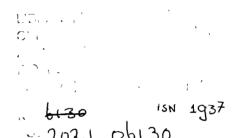
Women and the International Drinking Water Supply and Sanitation Decade

submitted to The World Conference to Review and Appraise The Achievements of the United Nations Decade for Women

Prepared in accordance with the decision of



1981-1990



THE INTER-AGENCY TASK FORCE ON WOMEN AND THE IDWSSD





UNITED NATIONS
INTERNATIONAL RESEARCH
AND TRAINING INSTITUTE
FOR THE ADVANCEMENT OF WOMEN
(INSTRAW)



THE UNITED NATIONS CHILDREN'S FUND (UNICEF)

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Women and the International Drinking Water Supply and Sanitation Decade

I. Introduction

The grave crisis the world is undergoing shows how interdependent the various development problems are. Many of these problems, particularly in developing countries, have reached a very critical stage generating even more complex situations. A case in point is basic infrastructure such as electricity, transportation, water, etc., where needs for these services are constantly growing, while their capacity cannot cope with these increasing demands. The world crisis has also indicated that the viability of certain economic tenets and development methods is not any more quite certain. Meanwhile, the new call to have the well-being of people, women and men alike, as the central objective of development is gaining momentum. This explains the growing concern and the increasing focus on problems facing the masses poverty, illiteracy, health and sanitation, food, drought, water, etc.

In the current debate on development due consideration is given to the population component which highlights the importance of both human resources and popular participation in the development process. This means greater attention is therefore devoted to the different groups of population, including women. Thus, the topic "Women and Development" has been one of the salient points of the on-going debate on the national, regional and international levels. The necessity to integrate women in development has been emphasized during these years by approaching women as active participants and beneficiaries of development, and so departing from traditional thinking that considers women's issues as a problem of social welfare. Therefore, women are deeply concerned with and equally affected by the various development problems.

One of the most critical problems facing many societies today is to secure adequate water supply which is the very basis for human survival. Recognition of the seriousness and the vital importance of improving water supply and sanitation worldwide was underlined by the international community at the United Nations Water Conference held in Mar del Plata, Argentina in 1977 which resulted in the subsequent launching of the International Drinking Water Supply and Sanitation Decade (IDWSSD) in 1980.

Moreover, since women in many societies are the most concerned with this problem, the World Conference of the United Nations Decade for Women, held in Copenhagen in 1980, addressed the water problem and realized that women of the world may spend as much as one third of their day locating and transporting water for drinking, agriculture, food production and preparation, and family hygiene. The Conference also expressed deep concern that insufficient water and unsafe drinking water and the lack of sanitation facilities contribute to a high rate of disease and mortality, particularly among women and children.

II. Legislative Mandate

The United Nations General Assembly during its thirty-fifth session proclaimed the period 1981-1990 as the International Drinking Water Supply and Sanitation Decade, during which Member States were to assume a commitment to bring about a substantial improvement in the standards and levels of services in drinking water supply and sanitation by the year 1990.

The World Conference of the United Nations Decade for Women Equality, Development and Peace, held in Copenhagen in 1980, recognized the critical importance of the issue and adopted resolution 25, entitled *International Drinking Water Supply and Sanitation Decade* which

"Calls on member states and United Nations agencies, including specialized agencies to promote full participation of women in planning, implementation and application of technology for water supply projects".

This resolution was subsequently affirmed by the United Nations General Assembly at its thirty-fifth session when it proclaimed the International Drinking Water Supply and Sanitation Decade. While, during the same session, the General Assembly in a resolution entitled *Effective Mobilization and Integration of Women in Development*, urged

"...the organs, organizations and bodies of the United Nations system concerned with the International Drinking Water Supply and Sanitation Decade, proclaimed by the General Assembly... to take fully into account the needs and concerns of women".

In response to these legislative mandates mechanisms were established by the United Nations system to coordinate activities at the international level in dealing with water supply and sanitation and the role of women therein.

One of the mechanisms of the United Nations system, the Steering Committe for Cooperative Action — IDWSSD, set up the Inter-Agency Task Force on Women and the IDWSSD. The Task Force, at its third meeting held in July 1984, decided to submit a report to the World Conference to Review and Appraise the Achievements of the United Nations Decade for Women to be held in Nairobi in 1985 on the activities taken by the United Nations Systems to implement the aforementioned resolution 25 adopted at the World Conference on the United Nations Decade for Women.

III. The Situation of Women in Water Supply and Sanitation

Over a billion people in remote rural areas and urban slums of the developing world, lack safe drinking water and even rudimentary sanitation facilities. By 1990, their number will reach two billion¹.

Consequences of inadequate water supply and sanitation are extremely evident. However, they hit women most severely. Women are carriers of water, managers, users, family health

Elmendorf, Mary L and Iseley, Raymond B, "Public and Private Role of Women in Water Supply and Sanitation Programmes"

educators, motivators and agents of change. They are responsible in this regard not only for themselves, but also for the members of their families and the community at large. The extent of their involvement, however, as well as the consequences, are virtually unknown either to the general public or to policy-makers and planners.

Like all development problems, the issue of water supply and sanitation is multidimensional. The problem lies not only within the socio-economic sphere, but also in the technical, scientific, and health and sanitation, as well as environmental spheres. Moreover, all these areas are interconnected, with a problem existing in one influencing the evolution and outcome of the other.

The seriousness of the problems involved in the area of water supply and sanitation are alarming, and the demand on those types of services is growing tremendously. Moreover, the financial resources required to face the problems are of great magnitude. These points lead to other pertinent questions, namely, how to manage those types of complex development problems with all the multiplicity of issues involved, who determines what the priorities are, and how coordination among various parties concerned will be achieved. So far, there are no clear-cut answers to these problems.

From various activities to gather information on the situation including meetings, studies and collection of materials and publications, a number of views have been expressed concerning the major problems facing women in water supply and sanitation as well as areas where caution should be exercised. They are summarized in the following paragraphs.

It is generally agreed that the main issue related to women and water supply and sanitation is not the incorporation of women in water supply and sanitation as they are already active participants. Rather, it is necessary to make women's participation more effective, easier and more productive.

Within the context of socio-economic development, three areas confront women with special considerations. These are community participation, perception and social values and institutional framework.

The involvement of women in water supply and sanitation falls mainly within the framework of community participation. The people, their culture, behaviour and values are important in the planning of any water supply or sanitation system. Because planners often overlook these considerations, improved systems usually fail to gain acceptance by the community. Moreover, a sense of ownership is a major element in gaining community participation, rather than focusing only on the community's material and labour contribution.

Because women are the primary drawers and users of water, and because society has forced upon them greater need for privacy in their defecation practices, the ways in which water and sanitation programmes benefit them can easily be observed. Less obvious, though just as vital, are the ways in which women determine the success or failure of the same programmes. As a result, women are often excluded when water and sanitation projects are planned and implemented.

Taking a larger view, it must be realized that unless women are perceived as an integral part of the income-generating labour force, much of the potential that can be generated from the time and energy economized may be wasted for the community. Similarly, the potential for benefits that can accrue from increased hygiene and sanitation may not be forthcoming unless these aspects are recognized and incorporated into water supply and sanitation projects in accordance with the very specific role that women plan as producers and users especially as mothers and housekeepers.

Striking a balance is not easy. Not only must the resources of the community as a whole be considered, but also special attention must be paid to the interests and potential of local women. Women are most directly concerned with water and sanitation as users, educators of children,

motivators of household changes, protectors of family health and contributors to the household economy (vegetable growing, cattle and poultry raising, etc.). They should therefore be closely involved in the planning and implementation of local drinking water supply and sanitation projects. This in turn will help women to gain more respect and to become valued members of their communities, and also to enhance their self-awareness and their position in society².

With regard to perception and social values, in many developing countries perceptions and social values are not conducive to accepting the changing role of women, let alone to permitting them to take part in planning and managing water and sanitation projects.

Women are often not even aware of the important role they are playing and could play in the provision of adequate water supply and sanitation. Not only should women be aware though, but men also be sensitized to the need to alleviate women's burden as the main carriers and users of water.

Lack of education and training also confront women with obstacles to more effective participation in water supply and sanitation projects. In this respect, studies have shown that high level community participation in a number of countries was perceived to be the result of high literacy rates.

Another major constraint to improved water supply and sanitation in developing countries and the role of women therein can be identified as deficiencies in the institutional and policy-making frameworks. In some countries there is no appropriate institutional framework to plan, programme, implement and monitor activities for the IDWSSD, while in others there is duplication and overlap of authority among existing institutions. Although special machineries on the role and status of women which have been established in many countries have in some cases undertaken many successful activities, they run the risk of isolating women's needs from national development priorities. Women's issues need to the treated as an integral part of all socio-economic and cultural development activities and programmes including water supply and sanitation.

The role of women's organizations is very vital, particularly at the national level with the common objective of advancing the socio-economic progress of their country in an integrated manner and with the full support of governments. This centralized approach would avoid the danger of the mushrooming of women's organizations which compete against each other and often work in an ad hoc and disorganized manner with no common objectives, ultimately resulting in weakening their potential capacity.

With regard to the health and sanitation aspect of water supply and sanitation, women's role is decisive in both developed and developing countries, as well as in traditional and modern families. This role is decided in accordance with family structure and division of labour by sex. Therefore, the proper attitude of women toward safe and adequate water and sanitation is a pre-requisite for a health care policy to be effective. Since there is a close correlation between health, water quality and availability, and sanitary conditions of the environment, there is a need to bridge the gap between all of these factors. This is where the effective participation of women is needed to enhance health and eradicate water-borne diseases that are so common, particularly in tropical and semi-tropical areas of the world.

Studies have shown that women as water carriers in many societies, and by virtue of their domestic functions, are in constant touch with water which is often polluted. Therefore, women were perceived as being the group most vulnerable to water-related diseases, which, according to statistics by the World Health Organization (WHO), were accountable for 30% of all diseases in the developing world.

Studies also show that water borne diseases are a major cause of high infant mortality rates.

² Report of the International Symposium, The Local Decade: Men, Women and Agencies in Water and Development, Amsterdam, 20-22 June 1984

Water related diseases also account for 15% of all hospital deaths. The average developing country point prevalence of diarrhoea is estimated at three or four percent, but in some areas could be as high as 16 percent. An estimated five million children in the world die annually from diarrhoeal diseases of which maybe one-third relate to water.

Pollution or contamination of water supplies is another problem faced by communities. This is often caused by neglect of the simple task of periodically clearing storage facilities.

Also crucial for raising levels of public health are improvements in practices of excreta disposal. Inadequate facilities for excreta disposal reduce the potential benefits of safe water supply by transmitting pathogenes from infected to healthy persons. Over 50 types of infections, can be transmitted from a diseased to a healthy person by various direct or indirect routes involving excreta.

Furthermore, some studies shown that the sanitation sector is not usually assigned the same importance as domestic water supply. Generally speaking sanitation in the rural areas is neglected because it is given very low priority by the rural population; and basic health education, public awareness and a proper institutional framework are lacking.

In the area of science and technology with regard to water supply and sanitation, it must be emphasized that to ease women's burden of being the main water carriers, realistic and appropriate technologies which take into account cultural, social, physical and financial specificity must be developed. Simple and appropriate technology would free women from having to walk long distances in search of water, as well as serving the purpose of changing the social roles of women's and men's labour distribution within the household.

Among the women-sensitive design elements to be considered, then, the most obvious is sources of water for the homestead. Ease of homestead access to water must be evaluated for cost effectiveness, and different degrees of access will of course be appropriate in different circumstances. Yet it is difficult to escape the impression that the economic returns to household water supplies have been consistently underestimated, where they have been considered at all. Adequate household water supplies, as noted earlier, can improve family health directly through increased water for homestead food production, which will improve family nutrition. Sale of surplus homestead food crops is often of direct benefit to women, giving them control over a share of the family income. Women's time released from water carrying and care of the sick is available for work of higher productivity, as well as for increased attention to children and for leisure³.

Technologies for improved water supply and sanitation, studies show, have often failed because they are inappropriate, too complicated or difficult to operate or maintain. Simple rudimentary methods should be used and developed using local materials in view of lower costs, and the possibility to provide for greater self-reliance from the community to the national level.

In response to the need to find ways and means to enhance women's role in water supply and sanitation, the results of studies, meetings and other encounters have proposed numerous recommendations and suggestions. Some of these are recorded in the following paragraphs⁴.

Maximum efforts should be made at all levels, international, regional and national to secure the incorporation of issues relevant to women in water and sanitation related activities. These issues should become integral parts of the ongoing and future work of the existing institutions in the field.

³ Cloud, Kathleen, Report to Principals in the CID Water Management Synthesis II Project and Others Interested in Women and Water Management, Consortium for International Development. Women and Development Project

⁴ Report of the INSTRAW Interregional Seminar on Women and the IDWSSD, Cairo, 12-16 March 1984, and the Report of the International Sympoisum, The Local Decade: Men, Women and Agencies in Water and Development, Amsterdam, 20-22 June 1984

Governments and regional, as well as international organizations should incorporate specific reference to women whenever discussing achievements and impediments relevant to the improvement of water and sanitation, particularly in developing countries.

Global, regional and national campaigns should be carried out in order to create and raise public awareness of the problems facing women in the field of water supply and sanitation. In this respect, the most modern information and communication technology should be used when appropriate for awareness-raising campaigns, as well as for training the population in general and women in particular.

National, regional and global information exchange programmes on water supply and sanitation should include issues on women's involvement as a specific topic of their exchange work.

Manuals should be prepared and advisory services carried out aimed at those responsible for decision-making in the water and sanitation field referring to the need to involve women in water and sanitation, and leading to more integrated development approaches.

Bilateral and multilateral donor agencies and organizations should give priority to activities which are beneficial to women and their families and should contribute to the promotion of long-term perspectives securing the adequate financial means in order to meet women's needs and ensure their participation well beyond the IDWSSD.

The multi-sectoral nature of water and sanitation activities involving women requires appropriate coordination among the national institutions and authorities involved in water, health, sanitation, agriculture and rural development programmes, as well as bodies in charge of education and training. Appropriate coordinating bodies at the national level should be made instrumental in the coordination between responsible ministries. National machineries for the advancement of women should assist and be consulted for securing pragmatic action at the national level.

Local community organizations should be identified and the role of women should be promoted in the planning and implementation process of water supply and sanitation programmes and projects within the recognized social framework of the community.

In programme and project formulation, caution should be exercised in order to involve fully those ultimately responsible. This includes exposure to new disciplines in sociological studies, living for periods of time among the communities where studies and works are being carried out, thus identifying suitable methods of approval based on first hand experience and knowledge, community consultation being made a necessary component in planning projects.

Leadership should be provided from the national level, particularly to give guidance on how capital investments remain unused due to failure to involve beneficiaries in planning, how capital investments have depreciated over a very short period of time due to the fact that people's participation was not considered at an early stage, how major capital investments spent needlessly in situations where local consultants as well as local materials could have been used.

At the implementation stage of projects, each contract should be divided into three components. labour, materials and equipment, to ensure that contributions under each component are discussed and arranged with the community before any contract is awarded to a private contractor. Suitable volunteer and women's organizations should be identified and supported to assist in the implementation of objectives, activities and programmes. Suitable women should be selected and trained as caretakers and health volunteers, to organize training workshops, etc.

At the evaluation stage, appropriate evaluation designs and tools should be prepared, taking into consideration the literacy standards, social structures, and other case specific matters. Women's organizations should be trained to use evaluation methods and to place more emphasis on the collection of suitable qualitive data.

In general, the following areas can be underlined as those leading to possible solutions to the problems of water supply and sanitation and the role of women therein

- the importance of community participation at all levels, including the grass-root level,
- raising awareness and sensitization of public opinion to the problems,
- training, particularly in the area of equipment maintenance and primary health care,
- education, whether formal or informal,
- appropriate choice of technology, working in harmony with the developing society,
- importance of planning of activities involved in water supply and sanitation and connection to the overall planning process.
- determining relevant methods of management coordination, implementation and follow up.

With respect to the socio-economic development aspect of improved water supply and sanitation, a primary focus of procedures for planning and implementating development programmes, particularly for the improvement of water supply and sanitation, should be to motivate and mobilize community members (men and women alike) to be involved as partners in the process, not merely participants. Community involvement can increase by coordinating training and work programmes with those persons at the community and more central levels who are responsible for water supply, sanitation improvement and environmental health education activities.

The existing social and economic expectations and the allocation and management of locally available resources constitute the background against which women's participation in IDWSSD activities are set. These expectations influence women's behaviour and should be assessed in terms of their impact on the ability of women to participate in improving household and community water supply and sanitation.

Appropriate information, therefore, on the role women have played and could play in development activities should be provided. This would help to improve public attitude regarding women's image, and more specifically, their image and role as active contributors and managers of improvements in water supply and sanitation. It would also show their overriding concern with the well being of their families and the environmental health conditions in their communities.

The financial requirements for providing water and waste management systems to rural communities may require additional provisions through the extension of loans or grants, or a portion of income from income-generating activities which also serve to increase the availability of productive work opportunities in the rural area. The capacity of a community, neighbourhood groups, or local financial institutions to assume this responsibility should be examined on a case-by-case basis, and women should be involved in this investigation.

In the area of health and sanitation certain areas should be given special attention. As a means of integrating women in water supply and sanitation activities, the preparation and experimentation of pilot activities for sanitary education on the development and conservation of water supply systems, sewage disposal and food hygiene should be emphasized. Also, the development of pilot projects in primary education on health and sanitation in rural areas, by employing women's labour.

Women should be trained as users and managers of sanitation services in the following areas.

- Adequate utilization and care of latrines by the family members, particularly children,
- proper disposal of feces, how to wash hands after defecating and before preparing or touching food,
- adequate recovery of wasterwater and excreta,
- adequate maintenance of sewage systems by means of supervised services and daily conservation and repair operations,
- inspection of domestic, regional and municipal systems contacting local authorities
 in charge of the public services as well as training other community members and the
 family itself.

With respect to the area of science and technology for water supply and sanitation, it is essential to find out about local needs through participatory research and continuing consultation at the community level, especially with women. It is also important to provide a learning situation in which the community members, especially women can familiarize themselves with the various technologies and become aware of the cost and value of alternatives for solving their defined needs in water supply and sanitation through public hearings with women participating in groups and as individuals.

Priority should be given to appropriate waste collection, water treatment, disposal and/or re-use techniques, which can be easily managed by women and without sacrificing health and environmental aspects.

In the design and application of community accepted technologies, women's needs and their physical state such as pregnancy and physical capacity should be taken into account. Women's views and opinions are critical in this regard, especially regarding the choice of technology and develop new and appropriate technologies to be introduced, to satisfy long and short term needs as defined by women. This will serve to influence acceptance and use of improved water and sanitation systems.

IV. Actions at the International Level

A. Mechanisms

A number of actions have been taken by the United Nations system with regard to water supply and sanitation and the role of women therein. This includes, *inter alia:* establishing mechanisms defining functions of international support and determining ways and means of attaining greater participation support and determining ways and means of attaining greater participation of women in water-related programmes.

The Role of the Steering Committe for Cooperative Action in Implementing the Objectives of the IDWSSD and the Establishment of the Inter-Agency Task Force on Women and the IDWSSD

Following two working sessions in June 1978 between UNDP and WHO, the outline of a programme of action was drawn up to meet the decisions of the United Nations Water Conference, the main thrust of the new approach being to develop a country-centered cooperative approach using regional and global action in support of national objectives.

At the same time, a Steerring Committe of seven collaborating United Nations agencies⁵ was set up, its functions including, serving as a regular forum for review and policy development,

 Membership of the Steering Committe has since expanded to include 11 United Nations agencies and organizations UNDP (Chair), WHO (Secretariat), ILO, INSTRAW, FAO, UNCHS, UN DIESA, UNDTCD, UNESCO, UNICEF, World Bank. developing a coordinated approach to orientation and management of individual programmes, and preparing agendas, guiding preparation and reviewing documentation for consultative meetings.

Certain aspects pertaining to the activities of the Decade were identified as requiring greater and more careful consideration, leading the Committee to establish special task forces of the Committee to delive more deeply into these areas. The task forces established include the areas of human resources development, project formulation, public information, exchange of technical information, and women and the IDWSSD.

The question of women and water supply and sanitation was not duly addressed until the nineth meeting of the Sterring Committee, held in April 1982 at which time the Committee acknowledged and endorsed the important role women could play in the implementation of the IDWSSD objectives and decided to establish and action-oriented inter-agency task force of the Committee for foster women's participation in activities of the Decade.

INSTRAW and UNICEF assume jointly the responsibility of the Secretariat for the Task Force. Membership also includes representatives of: FAO, ILO, UNDIESA/PPCO, UNDP, UNESCO, WHO and World Bank.

The Steering Committee at its tenth meeting, held in November 1982, endorsed both the terms of reference and the plan of action for the Task.

The terms of reference emphasized the need for programmes and activities during the Decade to enhance women's participation, at all stages and levels, and optimize the impact of improved water supply and sanitation on women.

The mandate of the Task Force as embodied in the terms of reference, focuses on the following; to develop a strategy for the enhancement of the role of women within the IDWSSD, to assist in activities in support of the Decade programmes in relation to the role of women, to act as a mechanism for collaboration in the development and implementation of activities at international and national levels, and to monitor, evaluate and report on implementation of Decade policies and programmes related to women in order to ensure that they adequately reflect the concerns, needs and contributions of women and recommend further action in this regard. (See Annex I).

The Plan of Action for the Task Force sought ways and means of implementing the Terms of Reference. Based on the terms, it coordinates and encourages individual and joint actions among agencies, and suggests activities in accordance with their mandates. (See Annex II).

Strategy of the Inter-Agency Task Force on Women and the IDWSSD

It was decided at the tenth meeting of the Steering Committee that a strategy document should be developed on the promotion of women's participation in water supply and sanitation activities. Its purpose is to emphasize the importance of women's involvement in water supply and sanitation projects and to underline the various aspects related to the issue in order to achieve the Decade's objectives. This strategy document, prepared by the Task Force, addresses itself to planners, decision makers and implementors of Decade programmes at the national and international levels. It suggests areas for action as part of IDWSSD activities. The strategy envisages involving women at the policy making, management, and technical levels for the programming, monitoring and evaluation of existing or future Decade activities. It does not envisage creating separate, parallel programmes. Thus, this document does not intend to reiterate IDWSSD objectives but rather to highlight women's aspects within them. The strategy was endorsed by the Steering Committee at its eleventh meeting held 30 November-2 December 1983. It has since been published and disseminated.

The recommended strategies for action are at two levels: the national and the international. At the national level, it is stressed that the success of national water and sanitation activities depends upon concerted and integrated efforts at the national level of governments and non-governmental groups including existing women's organizations. The areas pointed out as areas for policy adjustment, integration and training are: planning and programming, education, communication and information services; health and sanitation, technology; and operation and maintenance.

At the international level, activities could include defining, monitoring, guiding trends and encouraging action at the national level through technical support and training, as well as promoting awareness and exchange of information, in support of national activities. The international strategies could use: a country-specific focus, development of water supply and sanitation activities as complements to areas such as health care and community development, the promotion of the integration of women in the decision making process; and long-term perspectives to ensure that the activities of the IDWSSD extend beyond the Decade (See Annex III).

In addition, a follow up document was prepared, entitled "Insights from Field Practice", which depicts how women have been and could be involved in water and sanitation at the community level. It was submitted to the 12th meeting of the Steering Committe for Cooperative Action-IDWSSD, held 23-25 October 1984, and subsequently approved (See Annex IV).

Workplan of the Inter-Agency Task Force on Women and the IDWSSD

At the 11th meeting of the Steering Committee for Cooperative Action-IDWSSD, the Inter-Agency Task Force on Women and the IDWSSD was also requested to present to the 12th meeting of the Sterring Committee a tentative workplan in the area of women and the IDWSSD.

At the third meeting of the Inter-Agency Task Force on Women and the IDWSSD it was, therefore, agreed that member agencies of the Task Force submit to the Secretariat of the Task Force information regarding activities that each agency plans to undertake in promoting women's involvement in water and sanitation. Based on the information submitted, the Secretariat prepared the workplan. The time frame on the workplan covered activities planned for the latter half of 1984 through 1986 (See Annex V).

The Steering Committee accepted the workplan at its 12th Meeting, held in October 1984.

B. Actions

A summary of planned or on-going activities at the international level is as follows

Food and Agriculture Organization

The Food and Agriculture Organization (FAO) is preparing a document entitled "Women and Irrigation" which will include coverage of issues related to drinking water. The document will be published as part of a new series entitled, "Women in Agriculture".

In addition, FAO will prepare a booklet on the interrelationship of women, irrigation, drinking water and sanitation, which will be done in collaboration with WHO.

United Nations Children's Fund

The United Nations Children's Fund (UNICEF) plans to look into UNICEF assisted programmes of water and sanitation in Asian and African countries and will document experiences of how women have been and could be involved. Studies will be made to find out what difference it makes when women have been more actively involved in programmes. So far, three papers have

been published namely, "Women's Garden Groups of Casamance, Senegal", "The Women's Dam of Burkina Faso (formerly Upper Volta)" and "Rural Water Supply Project of Surigao City, the Philippines". More case studies will be organized, e.g., in Thailand, India and Sri Lanka.

It is also planned to develop a guideline for programming a health education component in water and sanitation programmes in the context of child survival and development. A working group session was organized in March 1985 to produce a guideline and the guideline will be field tested in many countries taking women as the main target group and active participants.

An evaluation of the performance of women caretakers of Bangladesh was carried out jointly with DANIDA. Household surveys were made interviewing the same numbers of men and women so that women's special needs and interests were taken into account.

UNICEF is participating in the UNDP project INT/83/003 in Sri Lanka and also is carrying out a case study for women's involvement in the Sri Lanka water project in Anuradhapura.

As convenor of the Inter-Agency Task Force for Women and the IDWSSD, UNICEF is working closely with other United Nations agencies in organizing the Task Force activities.

United Nations Department of Technical Cooperation for Development

While the United Nations Department of Technical Cooperation for Development (DTCD) has no water projects specifically oriented to women, it is involved in many related activities. These include.

- i) preparation of a document entitled, "Recruitment of Women for Technical Cooperation Activities of the UNDTCD", a working paper submitted to the meeting of national recruitment service and DTCD, held in Geneva from 24-28 September 1984
- ii) compilation of a computerized roster of applicants for positions in technical cooperation activities, including female positions in water, community development, etc.
- input to UNDP inter-organizational evaluation study on women in development, including a section in DTCD activities in water, with emphasis on projects in Haiti and the People's Democratic Republic of Yemen.
- iv) based on the evaluation mission for DTCD projects MLI/82/005 and NER/79/006 to assess the impact of ground water projects on women and economic and social life in villages, which concluded very positive improvement in women's economic and living conditions as a result of installation of hand pumps, thus relieving the traditional burden of obtaining water particularly for pregnant women and having a generally positive effect on the health of women and infants and richer protein in mother's milk, similar evaluation studies are planned for projects in Gambia, Guinea Bissau and Burkina Faso.
- v) inclusion under the regular programme, women's components as parts of DTCD projects being carried out in Senegal and Niger. Women are trained in ground water protection and management, as well as its efficient utilization and conservation.

United Nations Development Fund for Women

The United Nations Development Fund for Women (formerly the Voluntary Fund for the United Nations Decade for Women) finances four types of water supply activities, namely, training components for pump maintenance within projects such as those of the World Bank, which are largely for provision of hardware, revolving credit funds for cooperative community

groups to purchase household water storage facilities; development of water portage technology, and rural development projects wherein the water supply component is financed by another donor agency like UNICEF. Among the countries where the Fund is currently engaged in water-related activities are Burkina Faso, Cameroun, Ethiopia, Kenya and Morocco.

United Nations Development Programme

As Chairman of the IDWSSD Steering Committe, the Associated Administrator of the United Nations Development Programme' (UNDP) circulated the Task Force Strategy Paper Mentioned above to all UNDP Field offices requesting that it be brough to the attention of all relevant authorities at the country level.

In addition, UNDP is undertaking a project, INT/83/003 Promotion and Support for Women's Participation in the International Drinking Water Supply and Sanitation Decade, which was initiated in June 1983 with financing from the Norwegian Government. The Canadian and Netherlands Governments have joined in co-financing the project, which is co-operating in water supply, sanitation and health education programmes being carried out by governments with assistance from United Nations system agencies, bilateral aid programmes and NGOs in some 12 countries, to strengthen activities involving women in project design, implementation and followup. These country level activities, which are intended to serve as demonstrations leading to eventual follow-up both within and beyond these ongoing programmes, include support to, the Urban Health Volunteer Programme of the International Centre for Diarrhoeal Disease Control in Bangladesh, water supply and sanitation activities of a UNDP/OPE assisted Reconstruction Project in the Oruro Region of Bolivia, water supply and sanitation in the Beheira Governate in Egypt, in co-operation with Catholic Relief Services and the University of Alexandria, a sociocultural feasibility study of the potential of involvement of women's organizations in the Rural Sanitation Programme being carried out in 12 states in India with IBRD/UNDP/UNICEF asistance; the PKK in Nusa Tenggara Timur Province, Indonesia, to strengthen women's involvement in a UNDP/WHO-assisted water supply and sanitation project, the Kenya Water for Health Organization in Kenya to train trainers in community participation linked to an IBRD/SIDA handupump installation project; a UNDP/IBRD-assisted Rural Sanitation Programme in Lesotho for health education activities; the training of Women Development Officers from the Ministry of Panchayat and Rural Development in Nepal, to support women's efforts in water, sanitation and health education; the Women's Bureau in Sri Lanka, for collaboration with a UNICEF-assisted water and sanitation programme in Anuradhapura District, the Girl Guides of Thailand in promotion of water supply and sanitation initiatives in NE Thailand; the Rada'a Integrated Rural Development Project in Yemen Arab Republic, assisted by the Netherlands Government, and a Commercial Farm Health Workers Training Project being carried out by Save the Children Fund in Zımbabwe.

In addition to the above country-level action projects, of which seven are already under way and five are currently still in the design stage, INT/83/003 is also implementing certain global and regional activities aimed at establishing a solid data base on current experience, as well as documentation to provide some guidance on this basis. These include a Literature Review and Annotated Bibliography on Women in Water and Sanitation, being carried out in co-operation with the International Reference Centre in the Hague, to be published in June 1985, two Technical Notes for project planners and technicians, prepared in association with the IBRD Technical Advisory Group on Low-Cost Sanitation, a Workshop to prepare Case-Study Guidelines, and the Asian Region Case Studies being carried out in co-operation with WHO/SEARO (see above).

United Nations Economic Commission for Africa

In the ECA region the most urgent problem to be faced is the development of manpower. To do this, it will require staffing studies and training programmes of sector personnel at all

levels. Other problems include lack of finance, institutional weaknesses, policy issues, lack of equipment, problems of maintenance and operation of water supply points, and high rate of population growth which culminate in lack of progress in implementation of water supply and sanitation programmes.

United Nations Economic Commission for Latin America and the Caribbean

In the ECLAC region emphasis is being placed in providing service to the unserved low-income rural and urban-fringe population. In the past benefits have gone primarily to urban dwellers so it is necessary to rebalance the efforts. It is suggested that perhaps women's organizations, both national and international, could help direct efforts. Strong advocacy is required for the establishment of water supply and sanitation institutions concerned with solutions suitable for the country dweller, hand pump and latrines or other forms of individual or small group arrangements.

United Nations Economic Comission for Western Asia

In the ECWA region policies have mostly given priority to the expansion and restoration of the urban water-supply system, preferably in the capital cities. In most of the capital cities, a modern sewage system with treatment plants is in the planning or construction stage. Efforts are being made in all countries to set up distribution systems between the place of extraction and the consumer. Also all efforts are being exerted by water authorities to provide enough safe water at any time with adequate service pressure.

There are forty UN Decade for Women projects in the region that encourage public awareness in the merits of a safe water supply. As a result, some villagers took it upon themselves to share collective water costs to have safe water near their homes.

United Nations Economic and Social Commission for Asia and the Pacific

In the ESCAP region it was pointed out that the need for community participation and the development of realistic training programmes adapted to the needs of a target group are required to improve the water supply and sanitation situation in the ESCAP region.

There are a number of island countries as well as landlocked countries, where procurement of material and equipment involve considerable delays caused by transport bottlenecks as well as high costs. Efforts are being made to address these problems.

United Nations Educational, Scientific and Cultural Organization

Within the United Nations Educational, Scientific and Cultural Organization (UNESCO), different activities take place in the field of drinking water supply and sanitation. In connection with socioeconomic analyses, UNESCO is preparing a series of studies in different socio-cultural contexts to identify concrete problems preoccupying women and to determine their priorities at the local, regional and national levels. The results will be compared with national development plans, a conceptual and methodological framework will be elaborated and an international expert group meeting will be organized in 1985 to suggest pilot policy projects aimed at women's problems.

The programme on Man and the Biosphere (MAB) and the International Hydrological Programme focus on the rational use of resources, and in many developing countries, women are the main users of water resources. Three major regional projects on the rational use and conservation

of water resources in rural areas of Africa, the Arab States, and Latin America and the Caribbean are being implemented. They give particular attention to the participation of the local population, especially women, in the solution of water problems leading to the improvement of their living conditions.

Although not specifically designed for the purposes of IDWSSD, UNESCO's programme on education and training in hydrology and related water sciences has permitted a larger number of women at technician, university or post-graduate level to undergo general and specialized training in various fields of water resources utilization.

United Nations International Research and Training Institute for the Advancement of Women

The United Nations International Research and Training Institute for the Advancement of Women (INSTRAW) will continue to focus on efforts to implement the objectives of the IDWSSD, during the biennium 1984-1985.

Following the Interregional Seminar on Women and the IDWSSD convened by INSTRAW in Cairo in March 1984, the Institute will publish the report and proceedings of the seminar, which will be issued as a United Nations sales publication in early 1985, a booklet containing the recommendations of the seminar will also be published. Moreover, based on the results of the seminar, training materials will be developed in cooperation with other agencies.

In addition, as part of its contribution to the World Conference to Review and Appraise the Achievements of the United Nations Decade for Women, INSTRAW is organizing jointly with other United Nations specialized agencies and bodies, a panel on "Women and Water Supply and Sanitation" to be conducted during the NGO Forum, which will be held concurrent to the World Conference in Nairobi in July 1985.

World Health Organization

Recognizing that in many rural communities of the third world, women form the interface between the community and water and sanitation facilities, the World Health Organization (WHO) has prepared a proposal for a project that will deliberately involve women in operation and maintenance as well as rehabilitation activities. As part of the effort to achieve the goals of the IDWSSD, priority attention is being given to the rehabilitation as well as proper operation and maintenance of existing facilities prior to embarking on the installation of new ones. The project document was completed in August and is being submitted to UNDP for support under its project, INT/83/003.

WHO is planning, as part of this project, to support four case studies which will deal with women's participation in water supply and sanitation projects. This is a joint activity with UNDP under project INT/83/003 and cases to be studied are country activities being undertaken with INT/83/003 support in these four countries. The objectives are

- to analyze and evaluate the process and impact of women's involvement in water supply and sanitation projects in four countries in Asia (Indonesia, Nepal, Sri Lanka and Thailand). This will be undertaken by appropriate institutions in each of these countries under the direction and coordination of WHO. The studies will cover the impact on both the functioning and utilization of the improved facilities and the well-being of the women themselves.
- ii) to test and refine draft guidelines for undertaking case studies of this nature.
- iii) to contribute to institutional networking and foster technical cooperation among participating countries and institutions.

Other Action at the International Level to Enhance the Role of Women in the IDWSSD

In response to the call to enhance the role of women in the IDWSSD several important meetings have taken place at the international and interregional levels to seek solutions to the various problems of improving water supply and sanitation and the role of women therein. These include:

- 1. **INSTRAW Interregional Seminar on Women and the IDWSSD**, organized by the International Research and Training Institute for the Advancement of Women and hosted by the Government of Egypt, held in Cairo, Egypt, 12-16 March 1984.
- 2. Women, Health and Development, organized by the Pan American Health Organization, held in Washington, D.C., 30 April-4 May 1984.
- 3. The Local Decade: Men, Women and Agencies in Water and Development, organized by the International Reference Centre for Community Water Supply and Sanitation, held in Amsterdam, The Netherlands, 20-22 June 1984.
- 4. Women's Issues in Water Supply and Sanitation, organized by the International Development Research Centre, held in Manila, The Philippine, 24-26 September 1984.
- 5. The 15th International Water Supply Congress and Exhibition, organized by the International Water Supply Association, held in Monastir, Tunisia, 19 October, 2 November 1984.



Inter-Agency Task Force on Women and the IDWSSD Terms of Reference

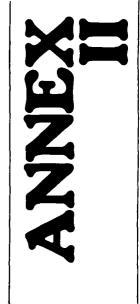
Given women's vital roles and concerns related to water supply and sanitation, it is imperative that greater attention be given in Decade programmes to enhancing women's participation at all stages and levels and to optimizing the impact of improved water supply and sanitation on women.

This requires, *inter-alia*, raising awareness among all involved in the cooperative programme of the Decade, particularly those at the country level, promoting the participation of women at all stages of the process of improving water supply and sanitation, encouraging the involvement of women's organization, and other activities within the programmes of the Decade.

Thus, it is proposed that the Inter-agency Task Force on Women and IDWSSD continue its work throughout the Decade as an action-oriented body of the Steering Committe for Cooperative Action to support the International Drinking Water Supply and Sanitation Decade and that it be provided with the means for ensuring follow-up action to its recommendations.

Therefore, the mandate of the Task Force would include the following

- I. To develop a strategy for the enhancement of the role of women within the IDWSSD,
- II. To assist in activities in support of the Decade Programmes in relation to the role of women,
- III. To act as a mechanism for collaboration in the development and implementation of activities at international and national levels.
- IV. To monitor, evaluate and report on implementation of Decade policies and programmes related to women in order to ensure that they adequately reflect the concerns, needs and contributions of women and recommend further action in this regard.



Plan of Action of the Inter-Agency Task Force on Women and the IDWSSD

- I. Develop a strategy for the enhancement of the role of women within the IDWSSD.
 - Prepare a strategy document and guidelines for the enhancement of the role of women in the IDWSSD at the national and international levels, publish and disseminate worldwide.
 - Review policies and practices at the international and national all levels to develop, stimulate and strengthen them as required, to ensure that they fully reflect the concerns, needs and contributions of women.
 - Collaborated closely with other task forces of the Steering Committe to ensure implementation of mutually supportive programmes, e.g. provide advisory services, action proposals.
- II. Assist in activities in support of the Decade programmes in relation to the role of women.
 - 1. Initiate and undertake action-oriented research to improve the data base, following identification of specific issues, countries and pilot projects.
 - 2. Promote awareness from community through international levels through collation and dissemination of information and experiences about the stake and potential of women in improved water supply and sanitation.
 - i) incorporated and emphasize women's role in existing publications,
 - ii) identify experienced individuals and organizations to undertake consultation/advisory tours,
 - iii) facilitate flow of information among all concerned with the Decade.

- 3. Initiate and organize workshops/seminars and study tours for orientation/training of planners and implementors of water supply and sanitation programmes.
- 4. Provide international support to national programme development.
 - review agency support projects or programmes at the country level to ensure the consideration and treatment of the women's component,
 - review information, education and training materials by agencies and make recommendations where necessary to ensure they adequately reflect the participation of women in all aspects.
 - iii) participate in joint programming whenever feasible,
 - iv) provide support to technical advisory groups and national structures including possible appointment of special personnel to act as focal point in order to promote and stimulate implementation of the strategy at the country level.
- 5. Initiate and promote support communication to ensure women's involvement in community participation for improved water supply and sanitation.
- III. Act as a mechanism for collaboration in the development and implementation of activities at international and national levels.
 - 1. Establish working relationships with funding and other contributary agencies/organizations, e.g. bilateral, multilateral, non-governmental organizations and groups, to promote implementation of recommended action.
 - 2. Strengthen the capacity of indigenous non-governmental organizations and women's groups for effective participation in Decade programmes through consultations, training workshops and seminars, study tours, etc.
 - 3. Act as a liaison wherever possible for organizations and groups to procure assistance: financial, technical, etc.
 - 4. Act as a focal point for the development of inter-sectoral activities through the use of on-going and planned programmes being undertaken by various organizations and agencies, literacy, rural development, primary health care, etc.
- IV. Monitor, evaluate and report on implementation of Decade policies and programmes related to women in order to ensure that they adequately reflect the concerns, needs and contributions of women, and recommend further actions in this regard.
 - 1. Promote participation of women in national programmes at all stage, and monitor and evaluate such participation,
 - 2. Evaluate progress reports provided by agencies on a regular basis to assess progress in implementation of activities related to the participation of women in the Decade,
 - 3. Carry out on a selective basis review of country-level programmes.



International Drinking Water Supply and Sanitation Decade Décennie internationale de l'eau potable et de l'assainissement Decenio International del Agua Potable y del Saneamiento Ambiental

العقد الدولي لتوفير مياه الشرب والمرافق الصحية

STRATEGIES

FOR ENHANCING WOMEN'S PARTICIPATION IN WATER SUPPLY AND SANITATION ACTIVITIES

Recomendations of the inter-agency task force on women and water, of the IDWSSD steering committee for cooperative action.

DECEMBER 1983



Strategies for Enhancing Women's Participation in Water Supply and Sanitation Activities

Introduction

On 10 November 1980 the General Assembly of the United Nations designated the years 1981-1990 the International Drinking Water Supply and Sanitation Decade (IDWSSD) with the goal to "Provide Clean Water and Adequate Sanitation to all People by the Year 1990". This was in direct response to the Mar del Plata Plan of Action adopted at the UN Water Conference held in Argentina in 1977.

Aware of the significant impact that the success of the Water and Sanitation Decade could have on the roles of women and on the success of the Decade, the 1980 World Conference of the UN Decade for Women adopted a strong resolution that specifically mandated "Member States and UN agencies, including specialized agencies, to promote full participation of women in planning, implementation, and application of technology for water supply projects".

Since then, several United Nations agencies (UN, UNDP, ILO, FAO, World Bank, WHO, UNICEF, UNESCO, UNEP, INSTRAW), have formed a Steering Committee for Co-operative Action to support the IDWSSD. At the ninth session of the Steering Committee held in April 1982, members endorsed the important role women could play in the implementation of the IDWSSD objective and decided to establish and action-oriented Inter-agency Task Force on Women and the IDWSSD, consisting of member organizations from the Steering Committee to promote women's participation in activities of the Decade.

It was decided at the tenth session of the Steering Committee held 10-11 November 1982 that a strategy document should be developed on the promotion of women's participation in water supply and sanitation activities. Its purpose is to emphasize the importance of women's involvement in water supply and sanitation projects and to underline the various aspects related to the issue in order to achieve the Decade's objectives. This strategy document addresses itself to planners, decision makers and implementors of Decade programmes at the national and international levels. It suggests areas for action as part of IDWSSD activities. The strategy envisages

involving women at the policy making, management, and technical levels for the programming, monitoring and evaluation of existing or future Decade activities. It does *not* envisage creating separate, parallel programmes. Thus, this document does not intend to reiterate IDWSSD strategies but rather to highlight women's aspects with them.

1.1 Present Situation

It is estimated that over a billion people in developing countries, half of which are women, lack safe drinking water and sanitation facilities.

Consequences of inadequate supply of water and sanitation are numerous and they affect women severely. Since women are the traditional water carriers in many societies of the developing world, they often spend up to six hours a day hauling water over long distances, sometimes as far as nine miles. The opportunity cost in terms of time wasted and energy expended in this drudgery is tremendous as it hardly leaves room to perform the numerous other chores and functions demanded of women, let alone allowing time for numerous other activities so vital to their families' survival.

By virtue of their domestic functions, regularly in touch with water (which is often polluted), women are particularly vulnerable to water-related diseases which, according to estimates of the World Health Organization, account for 80% of all sicknesses and diseases in the developing world.

These health consequences, additionally, carry along a certain set of economic consequences. For example, it has been estimated in one Asian country that 73 million working days are lost every year through sickenss due to these diseases. The annual cost to that country, in terms of medical treatment and lost productivity, has been estimated at about US\$60 million, thereby helping to perpetuate the vicious circle of poverty.

Despite their important and multiple roles, women are presently not adequately involved in IDWSSD activities. Present problems include.

- a) Not enough attention has been given to women as the primary human resources and the the ultimate users of water, women's work in water portage and sanitation are taken for granted in societies and not recognized as issues of concern or given an economic value.
- Women are often excluded from the planning and implementation of water and sanitation projects,
- c) Water supply and sanitation programmes lack elements of communication and information to women on the relation between water/sanitation and health, and on the complementary health practices which must be introduced if improved water supply and sanitation facilities are to have an impact on health.
- d) Water supply and sanitation technologies often do not take into consideration cultural context and level of know-how of the communities to which they are introduced. In addition they are not cognizant of women's needs and interests.
- e) Lack of consultation with women regarding technical aspects leads to improper design or inadequate attention to details (e.g. pumps with handles too heavy, or handles placed at the wrong height for women and children to operate).
- f) Local women's customs, preferences and traditions are not considered in choosing the technical design and location of project. For example, because women would not like

the taste of otherwise safe groundwater (e.g. with a high iron content) on piped water, they might go back to using the polluted surface water.

- g) Insufficient provision is made for maintenance and repair of the systems, which are areas of crucial importance where women's involvement can be extremely valuable.
- h) Social development programmes, especially improved hygiene and sanitation projects, are not dealt with in an integrated approach to involve all members of the family to support women.
- When community involvement is called for, women's roles, therein are usually ignored to the detriment of project success.

1.2 Role of Women as Part of Development Effort

The strategy for women's participation needs to consider water supply and sanitation as an integral part of the entire development process along with other socio-economic sectors. Improved water supply and sanitation facilities can have many direct benefits such as reduction of the drudgery of water collection, improvement in health, nutrition and food supply. Moreover, there are indirect benefits in the form of improved potential for economic and social development such as rise in productivity, incomes and improved standard of living.

Women are more than target groups, they are active agents who can contribute to the Decade efforts in decision making, generating ideas in policy, mobilizing labour, providing resources, and disseminating and implementing innovations. By involving women, particularly in the planning, design and operation and maintenance stages, as well as in complementary health education programmes, the water and sanitation projects can be expected to be more effective in achieving their ultimate objectives of improved water quantity, quality and health. Moreover, the active participation of women can lead to other improvements in women's status and roles in development.

At the national and international levels, governments, non-governmental organizations, women's groups and international agencies have critical roles to play. Three points of clarification should be made concerning their approaches to women's participation

- a) The strategy to enhance women's participation do not necessarily mean that new parallel structures must be created within United Nations agencies and at national levels. Women's participation should be part of the general efforts in water supply and sanitation activities.
- b) The women's dimension is not conceived in isolation in government or international agency activities and policy directives for the IDWSSD programmes because women's issues are an integral part of community and national development concerns.
- c) The emphasis on women's participation does not imply that activities should be carried out by women only. It stresses rather, the need for both men and women to address the issue.

Proposals to Enhance Women's Participation in Decade Activities

1. National Action

The ultimate success of national water and sanitation activities depends upon concerted and integrated efforts at the national level of governments and non-governmental groups including existing women's organizations. Although the IDWSSD was launched as an endeavor by the

international community it cannot be stressed enough that the fulfillment of the Decade objectives depends above all else on the active involvement at the national level. Equally, the recognition and enhancement of the role of women in water supply and sanitation depends on the firm commitment at the national level.

Women's requirements and contributions should be integrated into national planning and programming for Decade activities. Wherever possible, governments are encouraged to pursue the following policy considerations

- a) Ensure that women's needs and participation are duly considered by the existing institutional framework in charge of activities to improve water supply and sanitation.
- b) Provide directives to institutes for formal education and to governmental and non-governmental agencies for the recruitment, training and advancement of women, to enhance their participation in management, policy-making, planning, and technical fields.
- c) Include features on women in regular communications media, linking IDWSSD objectives especially aimed at women target groups. Such features should reiterate the role women could play in the planning, design, implementation and maintenance of water supply systems, and in health and sanitation services.
- d) Support existing women's organizations or groups with adequate information, training or funds.
- e) Provide guidelines for the integration of women's role in the implementation of programmes for agricultural extension, development of cooperatives, basic education (literacy), primary health care, etc., carried out in conjunction with IDWSSD objectives, in order to optimize resources and personnel and to ensure an integrated approach to overall development.

1.1 Planning and Programming

At all stages, national level planning and programming for improved water and sanitation should include the requirements and contributions of women. Plans and programmes should be tailored to priority areas according to national policies and development plans, be consistent with basic Decade approaches, and contribute to the attainment of the overall Decade objectives. Moreover, they must be socially, economically, politically and administratively feasible and reflect the resources available for their implementation within the country.

The following approaches are recommended

- a) Collection of base line data will be required to provide an adequate picture of needs and capabilities of women in order to ensure realistic planning. From a long term perspective, the creation of an information system including transmission and feedback that will afford coherent and continuing planning is required.
- b) Provision for a two-way communication of information transmission and feedback from the village to the national level in order to take account of women's participation as well as their involvement in as many phases of planning as possible, from problem identification, priority selection, resource allocation and implementation to monitoring and evaluation.
- c) Using community level women's traditional mutual aid or cooperative societies followed by a gradual expansion of their activities in the community, e.g. in protecting water sources from contamination, maintenance and repair of wells and pumps.

- Organization of seminars and workshops for women's associations, leadership, cooperatives and extension groups. Such groups could become valuable for identifying further needs and priorities.
- e) Integrating water supply and sanitation programmes with women's community development activities such as food production, livestock raising, water transport and storage, soap making and improved household technology, primary health care.
- f) Collaboration between government agencies and other organisations concerned, including non-governmental organisations, thereby enriching the resources available for follow-up pilot schemes, field surveys and feasibility studies. They may also contribute to improving the system of indicators used in monotoring and evaluating water and sanitation activities, their effect on women and the impact of the involvement of women.

1.2 Education, Communication and Information Service

Motivation and education on safe drinking water and sanitation through schools, health and other community programmes should be provided prior to, or along with the installation of water and sanitation facilities. Whether formal or informal, education programmes should reach women as well as all groups such as religious leaders, village elders or opinion leaders, teachers and students, etc. Another possibility is to use functional literacy classes in adult education programmes to create awareness about topics such as household and food hygiene or prevention of water related diseases. When possible, efforts should be given to short-term training programmes for women technicians. Women at the community and district levels may be trained in installations, operation and maintenance of simple and basic water supply and sanitation facilities as well as environmental sanitation.

A judicious use of information and media, based on national and local experiences can go a long way to promoting women's involvement in water and sanitation activities. Emphasis should be put on the advantages and benefits to women and the whole community in improved health, rise in living standards as well as in time saved for economic production as a result of improved water supply and sanitation. Communication through the media should be practical and applicable to the levels of the target audience so as to reach as many groups as possible. Media and messages should be varied, captivating, entertaining and accommodating to local culture and values. Among the useful media are public radio, posters and booklets, periodicals, newsletters, flip charts and other audio-visual materials. Traditional art forms such as dance, drama, puppet theatre, etc., have proven to be particularly useful. Women-to-women communication is also an effective channel to provide information to local groups and transmit messages to national planners, decision-makers, and women's organisations.

1.3 Health and Sanitation

Primary health care is the main approach endorsed by countries for achieving the goals and objectives of health for all by the year 2000. This emphasizes community-based health care, with the full involvement of community members and the articulation of the health care system with the traditional, or informal systems. An essential element of primary health care is an adequate supply of safe water and basic sanitation. Stressing preventive care, primary health care is intersectoral in nature and thus includes such sectors as education, agriculture and public works.

Women often make up the majority of primary health care workers, especially at community level. They should therefore be provided with special training on health aspects of water and sanitation in order to make their role more effective and to ensure that water-sanitation-health messages are learned together. This would also link other related projects, such as elimination of sources of water contamination, safe storage of drinking water, animal excreta disposal, control of water pollution and safe sewer systems (in peri-urban areas), control of diarrhoeal diseases, etc.

1.4 Technology

In water supply projects all over the world, emphasis is placed on systems available to all, using self-help and voluntary labour wherever possible to reduce the investments required as low cost as possible. The technology should be adapted to small-scale applications, suitable for community participation and management. There are three main aspects of technical appropriateness to be considered:

- Health and sanitary appropriateness adaptation to prevailing health patterns in order to achieve national health benefits.
- b) Functional appropriateness fitness of the equipment from the point of view of design and performance as related to the local attidudes, behaviours and bio-technological factors and its relevance to the objectives of providing adequate quantities of the water in a reliable supply available around the year.
- c) Environmental appropriateness fitness of the facilities to operate in the physical environment of the region concerned, and to avoid adverse effects on the environment. Adequate attention should be given to drainage which is often neglected.

The choice of technology should be appropriate to women's needs and careful consideration given to its impact on women's participation. Special measures are required to upgrade women's qualifications to handle new technologies.

Choices must also be made concerning the cost of technologies. To keep costs low, considerable input may be made using local resources and traditional methods in the production, construction, installation and maintenance of systems by the community. Failures to consult with those affected by water and sanitation projects may not only lead to unnecessary higher costs but also inappropriate choices of technologies.

1.5 Operation and Maintenance

It is known that operation, maintenance and repair have in many cases either been neglected or poorly planeed, leading to consequent neglect of the installations and eventual decline or failure of the programmes.

In maintenance, women, as the primary users, can and must play an important role. This may range from preventing misuse of equipment and keeping the environment clean, to preventive maintenance and simple repairs. Given the necessary training and support, women can fill the technical and management gap.

Rarely have women been trained in maintaining and repairing water supply and sanitation facilities. However, efforts have to be made to change the "traditional thinking" on the part of the planners and the old myth that women and technology do not work well together.

2. International Action

There is a great need to further promote and develop women's role and participation in IDWSSD activities within the existing institutional framework of multi-lateral and inter-governmental organizations, bilateral agencies, non-governmental organizations and other bodies, taking part in international co-operation for development.

Activities at the international level could include defining, monitoring, guiding trends and encouraging action at the national level through technical support and training as well as promoting awareness and exchange of information, in support of national actions. These activities may adopt the following approaches:

- a) Country-specific focus using international and regional action in support of national objectives.
- b) development of water supply and sanitation activities as complements to areas such as primary health care and community development and vice versa.
- c) promotion of integration of women's activities into a larger context through participation and training in order to have a greater influence in the decision-making process.
- d) promotion of long-term perspective to incorporate the needs and contributions of women in water supply and sanitation to ensure that activities go beyond the Decade.

2.1 Technical Assistance

Technical support by multi-lateral, bilateral and other external agencies, will reinforce the efforts by governments, NGOs and others, carrying out IDWSSD-related programmes, to develop and implement projects which will incorporate the requirements and contributions of women. These includes.

- a) Direct support for institution-building (or re-constituting) to enhance the role of women in water supply and sanitation including material assistance with emphasis on managerial and maintenance problems.
- b) Support to technical advisory groups and national structures including identification and strengthening of focal points in order to promote and stimulate implementation of programmes at the country level that incorporate issues of relevance to women in water supply and sanitation, including support for developing TCDC activities.
- c) Promotion and provision of support to research programmes relevant to women's roles and issues.
- d) Assistance in programme and project planning at the national level to ensure consideration of requirements of women in improving water supply and sanitation.
- e) Assistance in building national data-base networks in this respect.
- f) Supporting national women's organizations, focal institutions or women's bureaux for activities in the IDWSSD.
- g) Facilitating the transfer of experiences from other projects, as well as initiating feasibility studies and pilot projects for innovative approaches.
- h) Assistance in co-ordinated planning and allocation of resources from multi-lateral and bilateral sources, as well as collaboration with non-governmental organizations involved in water supply and sanitation projects to enhance women's participation. Stimulation of joint programming and programme support between governments and different agencies, whenever feasible.
- i) Monitoring and evaluating the implementation of Decade policies and programmes as related to women.

2.2 Training

The importance of promoting training for women in the field of water supply and sanitation must be firmly emphasized. Special efforts need to be made to identify women's needs and to train them accordingly particularly in technical and managerial skills regarding project develop-

ment, operation and maintenance, health and education. Activities at the international level should include.

- Supporting training at national and regional levels, which includes developing guidelines and training modules for women's participation, encouraging and providing support to governments, inter-governmental and non-governmental organizations, institutes, centres, etc
- b) Responding to requests for short-term advice to various regions or countries to assist in training activities, seminars and workshops on the subject of women and water supply and sanitation.
- c) Reviewing education and training materials to ensure women's issues are taken into account.
- d) Granting fellowships and arranging study tours to nationals from developing countries to visit successful projects and study the ways in which women's involvement in various roles has improved effectiveness of water supply and sanitation.

2.3 Awareness and Echange of Information

Agencies and organizations at the international level are important agents for promoting general awareness of the magnitude of the problem and particularly the stake and potential of women in improving water supply and sanitation. They also serve to enhance exchange of valuable information in this regard. Activities to be pursued at the international level include

- a) Emphasizing supporting formal and non-formal education to stimulate a change of attitudes, to enhance women's roles in IDWSSD, and to promote improved practices in water use and sanitation to achieve Decade objectives.
- b) Conecting an appraisal of existing information services at the international level engaged in or established for programmes related to women. Ensuring systematic and analytical documentation of existing institutional resources.
- c) Incorporating and emphasizing women's role in existing publications.
- d) Conducting case studies for identifying types of institutions and policies directly relevant to women's organizations, as well as to help government and other implementing agencies to assess women's participation in IDWSSD.
- d) Initiating and promoting project support communication to ensure women's involvement in community participation for improved water supply and sanitation.
- f) Facilitating the work of communications networks for women-to-women sharing of experiences and ideas.

III. Conclusion

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

If development schemes for the improvement of water supply and sanitation services are to go beyond technical issues, it is important that they include action plans and techniques for making full use of human talents at all levels, reaching out to the individual households. The incorporation of women into the activities of the IDWSSD is only one field of many in which efforts are being carried out in order to secure the integration of women into the mainstream of development at all levels. New and innovative ways will have to be sought, along which to achieve a more balanced participation of men and women in all spheres of development activity, decision-making and in enjoying the fruits of these joint efforts.



Insights from Field Practice - How Women Have Been and Could be Involved in Water and Sanitation at the Community Level-

l. Introduction

 Summary of the Strategy Paper: Strategies for Enhancing Women's Participation in Water Supply and Sanitation Activities

Recognizing the impact which women can have on the success of water and sanitation programmes, the United Nations Conference on Human Settlements (HABITAT) and the United Nations Water Conference adopted special resolutions recommending women's incorporation in these programmes. In addition, the 1980 World Conference of the UN Decade for Women adopted a strong resolution that specially mandated "Member States and UN agencies, including specialized agencies, to promote full participation of women in planning, implementation and application of technology for water supply projects". At its 10th meeting held April, 1982, the Steering Committee for Cooperative Actions to support the IDWSSD decided to establish an Inter-agency Task Force on Women and the Water Decade. A strategy paper entitled. "Strategies for enhancing women's participation in water supply and sanitation activities" was developed and distributed to international agencies including the United Nations agencies, the bilaterals and international NGO's as well governments of the developing countries.

This paper was addressed to planners, decision-makers and implementors of Decade programmes at the national and international levels. Its purpose was to emphasize the importance of women's involvement in water supply and sanitation projects and to underline the various tasks required to achieve the Decade objectives with a view both to enhancing effectiveness of these activities and to increasing the well-being of the women themselves and their families.

The paper emphasized integration of women's participation as part of the general efforts in water supply and sanitation activities. It urged that new parallel structures for women's activities be created and that women's participation not be viewed in isolation from government or international agency activities. It also emphasized that women's contribution was an integral part of community involvement and as such both men and women should address the issue.

The paper put forward a number of proposals and recommendations for action to be taken at the national and international levels to enhance women's participation in Decade activities. It emphasized the fact that the recognition and enhancement of the role of women in water supply and sanitation depends on firm commitment at the national level. It urged government planning agencies to integrate women's needs and involvement into national planning and programming for Decade activities. It recommended that governments coordinate their activities with non-governmental groups, including existing women's organizations. The Strategy Paper also suggested that international agencies promote awareness of the importance of involving women, in Decade activities, giving technical support to national efforts in this respect, and of sharing experiences of how to promote effective women's participation in water supply and sanitation programmes.

2. Purpose of the Present Paper: Insights from Field Practice

While it is increasingly recognized that women have crucial roles to play in achieving the goals of the Decade, there is inadequate awareness of how to go about promoting women's optimal participation. To begin with, the nature and scope of such involvement and the benefits derived therefrom, must clearly be perceived in order to guide the practitioner in the selection of appropriate interventions. Women's involvement in water supply and sanitation programmes is not simply as beneficiaries, i.e. merely profiting from the time and energy saved or the health improvement gained from the new or improved facilities. Experiences have shown that women, as primary users and managers of water resources and as the principle influence on family sanitary habits, can contribute a great deal to the better planning, functioning and utilization of the improved facilities when provided appropriate training and support.

The immediate question, therefore, is how best to approach, train and support women for these levels of involvement. To the extent possible these operational and training strategies should be based on what has actually been learned from country level experience. How can women be best involved? By what processes and under what circumstances? What changes result where women participate as decision makers and not simply as labourers or beneficiaries? What training methodologies have been found useful in equipping women for these broader roles?

The intent of the present paper is to share some ideas on how women can be motivated, organized and assisted at the community level, and to give a few examples of approaches which have worked or not worked based on the experiences gained from country programmes and field studies. It is not intended for use as a detailed technical guide or how-to manual on women participation in water and sanitation projects but rather to be supplementary to the Strategy Paper: Strategies for enhacing women's participation in water supply and sanitation activities. Its focus was on how women have been and could be involved in the project cycle at the community level. Its audience could be planners as well as implementors of water and sanitation programmes.

II. Women's Involvement Viewed in a Broader Context

1. Community Participation and Women's Involvement

The objectives of water supply and sanitation programmes are to provide more and safer water, not merely more wells or boreholes, more and better sanitation, not simply more latrines. Engineers know how to design appropriate systems, but the problem remains of how to ensure that they are used and maintained and that they continue to operate. A 1976 study revealed that nearly half of the improved facilities of water supply and sanitation were un-used or inoperative within a few years of their installation. While inappropriate technology and/or lack of spare parts was certainly an important factor, attention should be given to socio-economic considerations which influence acceptance, rejection or misuse of improved systems. Consultations with women are necessary to understand these constraints and motivations. Regretably, although the importance of community participation has become widely accepted, the importance of women's

roles in achieving programme objectives, in particular the objective of responsible community participation, is less defined.

Water supply and sanitation projects must be prepared and implemented with the full involvement of the user community and particular recognition should be given to the importance and diversity of women's role in these activities. Special emphasis has to be placed on targeting women as the main users of water supply systems and principal overseers of sanitation facilities.

At the same time, a discussion of strategies for increasing women's involvement in community participation must address women as an integral part of the total community. The community must be involved before we can talk of women's full involvement. In real life, men and women have joint responsibilities, each with different but interdependent roles and women fulfill complementary roles during the identification, planning and implementation stages of water an sanitation projects. The Dutch-aided Buba-Tombali Water Project in Guinea-Bissau is a good example of men and women complementing each other in pump maintenance. One man was selected to take care of maintenance of the pump including lubrication and report of break downs. One woman was selected to keep the well and its surroundings clean. Similarly in the training of community promoters, one to one men/women teams were utilized¹.

2. Primary Health Care

In attempts to meet the target of providing all people with safe drinking water and improved sanitation by 1990, and health for all by the Year 2000, increased emphasis must be given to the interdependence of these laudable goals for enhancing the quality of life. For the fulfilment of all such goals, community women must, in fact, function as frontline workers.

The essential elements of primary health care include an adequate supply of safe water and basic sanitation and health education. The involvement and training of community level health workers and volunteers, including traditional birth attendants are critical aspects of primary health care. Women often make up the majority of primary health care workers, especially at the community level. They should therefore be provided with special training in the health aspects of water and sanitation in order to make their role more effective and to ensure that water-sanitation-health messages are learned together. This would also provide links to other related activities, such as elimination of sources of water contamination, safe storage of drinking water, animal excreta disposal, control of water pollution and safe sewerage systems in semi-urban areas, control of diarrhoeal diseases, etc.

Other village community workers and development cadres, i.e. agricultural extension agents, community development agents, home economics agents, and school teachers, have important roles to play in primary health care, including water and sanitation. Women could increasingly be recruited for positions in these areas and could be provided with short term, in-service training on the health aspects of water and sanitation. This would broaden the scope of their involvement, enhance their roles and optimize the use of human resources in the implementation efforts.

3. Women and Development

The strategy for women's participation needs to consider water supply and sanitation as an integral part of the entire development process along with other socio-economic sectors. Improved water supply and sanitation facilities can have many direct benefits such as reduction of the drudgery of water collection, improvement in health, nutrition and food supply. Moreover, there are indirect benefits in the form of improved potential for economic and social development through increased productivity, enhanced earning power and improved standard of living.

In Pakistan, after the piped water supply system was brought to a village, women expressed

hope that other activities, including income-raising schemes could be organized in concert with water supply schemes in order to put saved time to good use².

In Senegal, the government-sponsored integrated rural development programmes have assisted women to organize themselves and grow vegetables. Women contributed membership fees to form garden groups. This provided the basic capital fund to be used to dig wells and build fences and roads. Women grew vegetables on individual plots in the collective garden. This brought them increased income. Some have opened bank accounts from their earnings. This is an example of how improved water supply can lead to multiple benefits women initiated health and social service facilities. One garden group donated money to build a village maternity centre³.

III. How Women have Been and Could be Involved in the Various Stages of a Water/Sanitation Project Cycle

1. Planning

1.1 Planning at the Community Level

This paper will focus on the ways and means of involving women at the community level. For women to be involved at the community level, it is necessary that,

- a) governments and cooperating external agencies adopt an unambiguous policy of commitment to the involvement of women in development and in Decade activities in particular and that funds be earmarked to make this possible,
- b) budgets be prepared taking into account time, money and the personnel required for activating full community participation, including women;
- c) the intention to involve women in the water supply and sanitation programmes be clearly enunciated by the programme planners and clearly defined in the programme document.

As situations vary from community to community, there is no single model of women's participation suitable for all situations. In community level planning, one has to begin by studying and understanding the status of women in the particular community. Women's community level status, viewed from the social, cultural and economic perspectives, may generally fall into one of the following three categories. Different approaches need to be developed for involving women, according to the different situations as suggested by the examples.

a) A society where women are actively involved in economic production. Culturally the women are free to participate in community life. They are well organized into women's groups or organizations. Under such circumstances, a higher level of women's involvement is possible.

The Surigao rural water supply project of the Philippines is an example of full participation of women in planning and implementation. In Surigao City, women are very well organized into Mothers Clubs which are under the supervision of the City Health Bureau. These clubs are active in primary health care and income generating activities. As women used to travel 3-5 kilometers up the mountain to fetch water, they approached the city administration for assistance to build a gravity flow water system to bring water to the system to bring water to the villages. The City Administration responded positively to these requests and subsequently the Surigao rural water supply project was developed. The Mothers club worked closely with the project technical team in the feasibility study, the design of the system and its implementation. After water was brought to the village, mothers clubs organized environmental sanitation

activities including the building of toilets, disposal of garbage, and promotion of personal and domestic hygiene. The village sanitation has improved greatly⁴.

b) A society where women have no apparent role in decision-making either at home or in the community. Segretation is practiced between men and women. Under such circumstances, it is more difficult to promote women's involvement. However, it is not impossible to involve them if correct approaches are taken.

In the Pakistan Integrated Water and Sanitation Programmes of 1981-1986 in Azad Jammu and Kashmir, one component is to train sanitation promoters whose duty is to motivate and help promote latrine building in the villages. Since segregation between men and women is practiced in the villages, the government officials are convinced that special efforts needed to be made to train female sanitation promoters together with men. This was the first time the local Government and the Rural Development Department had tried to recruit women. To begin with, out of 44 sanitation promoters trained during 1982, 8 were women. An evaluation of the project carried out in 1984 showed that considering the social, environmental and organizational difficulties, the female promoters were doing a remarkable job. One female sanitation promoter explained why "In villages, female motivators can visit houses with much less difficulty than male promoters because village women do not allow male strangers to enter their houses and talk to them. I first organized a women's committee of five women and trained the committee members to keep their houses clean, burn the garbage and motivate them to build latrines. When these committee members were motivated and trained to keep their houses clean, other village women followed them. Women motivate other women as well as male members of their families. This is how the message of sanitation and health can soon reach every household in the village and the village itself can become much cleaner"5.

c) A society where there is a large number of female-headed households, either on a temporary basis due to out-migration of male workers or on a permanent basis as a result of widowhood, divorce of abandonment, etc. Under such circumstances men may still hold official positions of authority but women have influence in decision-making and often assume responsability for project implementation.

In Lesotho, over one third of the households are female-headed largely due to labour migration. About 50 percent of the adult males are employed outside the country. Naturally, women do most of the work in the home and community including installing new water systems, digging trenches, laying pipes and carrying rocks needed to construct water reservoirs. When the Government embarked on a programme to train water minders or handpump caretakers to ensure sustained proper use of systems, it encouraged the village water committees to select women to be trained together with men. Between 1981 and 1983, of the 348 water minders trained, 115 were women.

Matsotang Molibeli (37), a mother of six, was given a five-day training course in the importance of potable water supply, the operation of the handpump and the potential breakdowns of the handpump. She was also instructed in public relations, personal hygiene and environmental sanitation. Supplied with a kit of basic tools, she returned to her village, Matlohelva, to take care of the system. Matsotang is also responsible for mobilizing her neighbors to help cut the grass around the water source and clean the distribution tank and seal boxes, collecting money from each family every month to defray the cost of diesel for the pump engine, maintenance of spare parts, transportation and the engine attendants' wages. During winter when snow lies 2-3 metres deep, she ensures that the pipes are covered with earth lest they freeze and burst.

Women water minders, according to Seth N'toi, the Technical Training Officer, have proved to be more reliable than men. Because many men do not believe in doing

voluntary work, they often abandon their responsibilities. As a result of the work of the water minders, systems work more efficiently now⁶.

1.2 Needs Assessment

Community information and dialogue with the community is the first step for involving the community and women in project planning. Through both informal and formal consultations with a broad spectrum of community members, including traditional and functional leaders, the attitudes, beliefs and values of men and women need to be obtained separately, requiring a separate sampling from each. This is very important since men and women have different views on the importance of water supply and sanitation, while women might identify a water supply project as the first priority as they are the ones who have to walk long distances to fetch water, men may not feel the need for a water supply system. The same is true of sanitation facilities. A survey in Bangladesh carried out in December 1976 reveals that the sanitary latrines are primarily used by women, as it was they who felt the greatest advantage in having a latrine installed close to home. In a few cases, two latrines can be found in one household one for the males and the other for females. In general, however, males and children hardly use latrines⁷.

The following means for involving women at this stage have been suggested

- to work through existing structures, women's organizations, women's groups, traditional women's leaders, birth attendants, etc.,
- to ensure that information about meetings or activities reaches the women,
- to arrange that the time and venue of meetings and activities are conducive to women's ability to attend,
- to encourage active participation of women in discussions during consultations;
- to use female staff and volunteers to liase with women,
- when necessary, to hold special meetings with women, and to use key local women in segregated communities such as teachers, nurses or village birth attendants, to provide indirect representation of women in water supply and sanitation project decisions.

The Baldia project in Karachi, Pakistan is a successful example of improving the sanitation in a slum area. Since the project was launched, 70% of the households have built soakpit latrines. The initiative for latrines often came from women. It is women who suffer most the inconveniences and indignities when there are no toilet facilities in the home. It is also women who have to take care of the needs of their children and any aging housebound relatives. Almost half of the work of constructing latrines has been undertaken by women. All the health committees formed all have women representatives among their most active members⁸.

1.3 Data Collection

A socio-cultural study should be carried out as part of project planning. The overall guide-lines for such an exercise are clearly described in "Methods for Gathering Socio-Cultural Data on Water Supply and Sanitation Projects" (Simpson-Herbert TAG Technical Note No. 1, The World Bank, Washington, 1983). In an earlier publication, a basic questionnaire was adapted for various case studies to suit local conditions. ("Socio-Cultural Aspects of Water Supply and Excreta Disposal, Elmendorf and Buckles, Vol. 5 in Appropriate Technology for Water Supply and Sanitation, The World Bank, Washington, 1980).

In household surveys, to elicit information merely from men would not suffice since women

have more personal, day to day experience of family water use and hygiene habits. Therefore, in the selection of interviewers, there is a need to consider both male and female community members. It is also important to hold separate interviews for women so that they can express their views more freely. In many situations, women are shy about discussing defecation and water use practices when interviewed in the presence of men. Men naturally assume the role of the spokesman for women as well as themselves and often given erroneous information inadvertently.

For water and sanitation project planning, it is recommended that persons carrying out data collection live in the villages for a few days and participate in the daily lives of the people. As many activities concerned with environmental sanitation occur at dawn or dusk, living in the villages for a few days can yield valuable data. The importance of involving women — both as observers and as observed — in this early planning cannot be over-emphasized.

Thailand is one of the countries that has achieved a remarkable level of success in trying to achieve the goal of the Decade. It is quite likely that almost every village household in Thailand will have a minimum of 2 litres of safe drinking water per capita per day and a sanitary household privy by 1990. It is estimated that by 1988, 44% of rural households already had their own latrines. The great majority are water seal latrines. Most are models designed in Thailand, cast right in the village or in a nearby village, and are widely accepted for their convenience, privacy, dependability, lack of odors and low cost. Thailand's experiences in delivering village water and sanitation services are: pursue a bottom-up, decentralized approach, responding to community request but not imposing or imploring them. To achieve this, a vigorous attempt is being made to strengthen and work through district and village level organizations. Project funds go directly to district committees composed of elected village headmen and elected village elders. Village committees apply for these funds after villagers have decided how to go about meeting their own perceived basic needs. To help them do this, village committees are given easy-to-use questionnaires and are taught how to collect information from each household and how to analyze their findings⁹.

2. The Design and Choice of Technology

In reaching technology decisions, full advantage must be taken of women's knowledge in water and sanitation aspects of the environment, including water source and water quantity during dry and wet seasons. Women as water drawers can provide important information. For example in the Surigao rural water supply project in the Philippines, women told the engineers the short-cut trail leading the spring source to the village. The engineers found that the amount of pipes and fittings requested originally for 11 systems could be used to extend service to eight more villages 10. In Panama, women took the engineers to a fresh water source on the shore of the island which had not been found during the feasibility survey 11.

Women should also be involved in decision-making on the design of additional facilities for washing, hand washing, animal drinking, vegetable growing, and other activities. In rural Khuzistan, Iran, communal laundry facilities built were large rectangular sinks, at adult waist height. However, Iranian women traditionally wash clothes and dishes in a squatting position. As a result, the laundry basins were not used 12. In Guatemala when standpipes had to be shared by three families, women helped in deciding which groups could share. They also made adaptations for laundry and other uses 13.

Consulting with women on the design of latrines can often result in simple technological changes which make latrines more acceptable to users. For example, in Nicaragua the latrine was not used by women because their feet could be seen from the outside. In Yucatan, Mexico, the engineers recommended a squat plate type instead of a pour-flush latrine because they thought women would refuse to carry water from the standpipe. However, after consulting the women there, they found that the women rejected the squat plate and preferred the pour-flush 14. In 1980 in Honduras, a pour-flush vitrified stool latrine was introduced in small numbers to rural

areas. This type has since been requested by women in many Central American countries, and is now manufactured in several countries. An improved model is being tested in Brazil¹⁵.

3. Implementation

3.1 Construction

In most low-cost water supply and sanitation projects for low income communities, women motivate and contribute a substantial part of the labour input in construction of water supply systems or latrines. In Malawi, for example, it is estimated that women provide up to 70% of the labour in most of the piped water schemes implemented ¹⁶.

Aside from women contributing unskilled labor, attempts have been made to involve women in skilled jobs. In a UNICEF-assisted water supply project in Nepal, a pilot project trained a few women to lay pipes. These trained women are doing well. In Sri Lanka, women were trained in handpumps installation and repair in a project supported by the International Development Research Centre in Canada and the national Sarvodaya movement of Sri Lanka.

In Thailand, rather than train villagers in district or regional centers, they are trained in villages at sites designated as "Transfer training centers", usually in the shade under a village headman's house. People to be trained as craftsmen are carefully selected jointly by village committees and health workers based on a candidate's reputation for honesty and community spirit. Now half of all trainees will be women who will work alongside men in learning to mix concrete, pour latrine bowls and cast rainwater jars. Many school children and their teachers, the majority of women have been trained ¹⁷.

During the construction phase of a project, women can be motivated to contribute materials which are locally available. This may take the form of bricks, sand, stone or timber. In Burkina-Faso, formerly known as Upper Volta, women participate in the building of earthern dams by collecting the rocks and preparing the gravel stones needed for construction¹⁸.

In nearly all cultures, women provide back up support to the construction workers in the form of food, water, etc.

3.2 Operation and Maintenance

In most low-cost water supply and sanitation projects an operation and maintenance system that involves the community is always more effective. The experiences in Malawi have demonstrated methods to establish a suitable organizational structure and to involve women to play their role.

In the Malawi gravity feed pipe scheme, the chief instruments of implementation and maintenance activities are the organization of a network of village committees. At the apex of the network of committees is the "project committee". It oversees the long period of construction and continues to oversee the operation and maintenance of the system. In larger projects, there are section or branch committees that perform similar functions for major parts of the system. After the completion of a water supply system, "tap committees" are organized. These committees enforce the rules surrounding water use and are responsible for care of the tap, its surroundings, replacement of washers and broken tap parts. Most members of the "tap committees" were women. A one-year study of this community maintenance indicated successful results with an average of nearly 90% level of service 19.

The following examples show how women are trained as caretakers of the water supply system. The Responsibilities of caretakers of water supply systems vary with the different systems and their technology. A caretaker's responsibility varies from simple repair to simply keeping the pump site clean, supervising the correct use of the pump or other water supply

facility and/or providing hygiene education. In Bolivia as an adjunct to an agricultural development project, bi-lingual indigenous women, 17 to 25 years of age, were trained to administer immunizations, provide information on child nutrition and lecture on the proper maintenance of water and sanitation facilities. A number of these young women were reportedly in complete charge of repair and maintenance of the facilities²⁰. In Angola where women have been recruited as water source monitors, the breakdown rate has declined decidedly²¹.

In Sri Lanka women have been trained as caretakers during nearly a decade. Women are also manufacturing a pump in a pilot project sponsored by IDRC/Sarvodaya. The new skills learned can help them latter with operation and maintenance in their communities.

In South India, a village level maintenance of handpumps for deep wells was developed. In 1978, two years after the project began, 620 caretakers had been trained. One of the most serious contradictions in having young men as caretakers was that they themselves do not collect water. The women did not even know who the pump caretaker was. The most effective source of young women caretakers was a voluntary rural development organization, called "The Island of Peace", which had a cadre of women workers based in about 40 villages. The women, were all trained as pump caretakers at UNICEF camps. Some of them proved to be particularly effective. Those who were nearest to the pump can ensure that the pump is properly used and the area around it kept clean. Caretakers also have the support of a women's group, the village "Matra Sangam", that pays for the repairs²².

A variety of models for a simple, low-cost handpump which can be village level operated and maintained (VLOM) pump are being developed and tested with support from a UNDP/World Bank project. The new designs will be lighter and easier to repair. It is hoped that this will encourage arrangements for training women as caretakers.

The following examples show that women have been successful managers of water systems. In Honduras, at the suggestion of a women's legal society in Tegucigalpa, barrio women enlarged their group to a community wide action committee headed by women. They made a formal request to the city authorities to get four standpipes installed in their hillside slum. They put two standpipes near the top of the hill and two near the bottom, protected by little wooden shacks. One of each pairs is open five hours a day in the morning, and the other five hours in the afternoon. Community woman, usually from a female headed household, is hired by the committee on a rotating basis to be in charge of the standpipes, to collect set fees for water and to keep the water sites clean²³.

In Panama, a USAID project trained and educated women to participate in the piped water system. In many committees, women had initiated steps to obtain the improved water system. They contributed during construction by carrying heavy loads of sand and by preparing food for laborers. They were involved in maintaining the system and in several communities they collected water fees. Women are said to have emerged as local leaders and successfully managed the collection process²⁴.

4. Monitoring and Evaluation

It is recommended that the Minimum Evaluation Procedures (WHO/ETS/83.1, CDD/OPR/83.1) be used for the assessment of the functioning and utilization of water supply and sanitation facilities. Methodologies for monitoring and evaluating both women's impact on the project and the project's impact on women themselves are being developed by the UNDP Project INT/83/003.

The following types of information need to be collected to establish whether women have been involved and the extent of their involvement in the project.

 Are there women sitting on the existing village water committee or its equivalent? If so, what is the percentage of women and what role do they play?

- Are women consulted on the choice of technology, the selection of well sites or pump sites? Are they consulted on additional facilities such as washing, bathing facilities?
- Are women involved in the construction? If so, what is the percentage of women's labour input in construction? Do women contribute in other ways, i.e. food, laundry, etc.?
- Are women given training in maintenance of water supply schemes? If so, what is the
 percentage of women trained as preventive maintenance workers/caretakers/managers
 of the facilities?
- Are women trained as health/hygiene educators? If so, what is the percentage of women trained, as compared to men? What is the relative impact made by trained men and women? A further survey could be done to check the turn over rate of trained women as compared to trained men.

To evaluate women's impact on the project, studies are needed comparing the functioning and utilization of a project without women's involvement and that of a project where women have been involved. Such surveys will contribute to raising the awareness of planners and engineers of the impact women have had on a water/sanitation project. Recently, a study in Bangladesh was under taken to compare the performance of women caretakers and men caretakers. The study was carried out jointly by DANIDA/UNICEF from March to July 1984, 60 villages were selected and 377 caretakers, 256 men and 121 women together with another 377 users were interviewed. The preliminary findings show that over 90% of the tubewells are functioning well. The women tubewell caretakers are doing the same simple repair work of the No. 6 Handpump as the men caretakers. The women caretakers interviewed indicated their general disagreement with the conventional belief that women mostly depend for the reparing and maintenance work on their husbands. In fact, 76-86% of the women caretakers performed repair on their own. Only 8% took direct help from their husbands/sons. However, the purchasing of spare parts in the market was done by men since women in Bangladesh villages do not often go to markets. In terms of cleanliness of pump sites, women caretakers are found to do better than men. 20% of the tubewells taken care of by men were found unclean compared to only 10% of the tubewells taken care of by women. On the other hand, 40% of the women caretakers cleaned their platforms at least twice a week while only 20% of the men caretakers did the same²⁵.

To evaluate the impact of water projects on women, time saving as a project objective can be easily identified and evaluated. Time budget studies of women's daily routines on a seasonal basis will indicate whether or not time has been released to women and how women use the time released. Such a study should investigate the following types of questions.

- Do women derive economic benefits from the release time? How women use the saved time for income generating activities such as sewing, handicrafts, vegetable growing, for greater involvement in the local market system, for educational and training or learning new skills, or others.
- Do women achieve health improvements? The type of benefits received more time to take care of children, more water for washing, bathing, personal hygiene, acquire more knowledge about hygiene and water related diseases, change of behavior in water usage, food preparation, personal hygiene, environmental cleanliness, better disposal of wastes, etc.
- Do women receive any income during the construction of the project?
- Do women learn new skills?

IV. Special Issues

1. Training

From the examples already mentioned above, women have been trained to be community level workers as caretakers, managers of improved systems, sanitation promoters, even skilled workers, etc. The involvement has made positive impacts, However, to ensure that women be included in the training programmes of water and sanitation projects, the following aspects need to be emphasized.

a) Selection criteria for trainees

In addition to the general criteria for selection of trainees, special provisions should be made so that a certain percentage of women are recruited. In Nigeria, the Imo State Water project trained village based workers to carry on health education. The criteria of selection of trainees was that each village must select both men and women. So some village selected 2 men and 2 women, others one man and three women, or vice versa. This ensured that a certain percentage of women were selected and trained ²⁶. For posts where some financial renumeration from the government is available, it is men who are usually selected as trainees. Whenever feasible opportunities should also be given to women.

b) Special measures facilitating women trainees' participating in training.

Short-term training would be more desirable for women's participation. Training sites located in the villages would facilitate women trainees' attendance. Sometimes, simple child care facilities should be provided so that young mother trainees can bring their young children with them.

c) Women trainers and retraining of existing field staff.

It is necessary to train women as trainers at the village level in order to reach women. Special supplementary modules should be prepared to extend learning into homes. Women should be involved in developing training materials. Sometimes, there needs to be retraining and refresher courses for existing field staff to improve communication skills with women.

For example, in Sri Lanka, special workshops were set for selected community development workers to train them to work with rural women in designing income-generating activities with health and sanitation components²⁷.

d) Support for voluntary workers.

For men and women trained at the community level, most become voluntary workers. More women than men work as volunteers at the community level. Community might be mobilized to support them either in cash or in kind or exemption of obligatory labour. Sometimes if they are not paid in money or in kind, some recognition or appreciation shown to these voluntary workers will also help. A rise in status can serve as incentives for voluntary workers, as was noted in Togo where volunteer pump caretakers who were given positions on the village committee performed better and felt rewarded²⁸.

e) Co-ordination of training community level workers.

In communities where there are trained health workers, every effort should be made to promote collaborative activities integrating water and sanitation components in the primary health care programme. At the community level, since many different outreach services aspire to benefit women and depend on women's active and responsible participation, it follows that institutional responsibility for training must be shared. While sharing the responsibility to im-

plement training, however, precaution must be taken to ensure that it is conceptually integrated. Nothing could be more confusing to the recipients of services than to be approached by staff with conflicting philosophies and methodologies of field work.

2. Health/Hygiene Education

Providing water supply systems without sanitation and a support programme of health/hygiene education is not enough to bring about health impact. In integrating this support component, it must be remembered that this is an area where women's involvement could have the greatest potential impact. The following ways of involving women are recommended.

a) Education of women as users

Hygiene education, both personal and household, should be first of all focused on women, bearing in mind primary strategies related to knowledge, attitudes and practice.

Knowledge:

Increasing knowledge of the water/infection and the excreta/water/food/infection relationships by linking information to existing beliefs and new practices.

– Attitudes:

Promoting positive attitudes toward hygienic use of transport vessels and storage receptacles, without neglecting the necessity of ensuring that appropriate vessels, receptacles, and cleaning materials or supplies are available locally and at prices within reach of the population.

— Practices:

Promoting water handling, excreta disposal and food preparation practices that contribute to better health, use of clean, covered transport and storage vessels, hand washing after defecation and before food preparation, covering leftover food, toilet training of toddlers, proper disposal of infants's stools, and proper use of care of latrines.

b) Train women as promoters and educators.

Women themselves have been found to be the most effective promoters and educators in programmes where they are the primary focus. Women workers generally understand more intuitively the problems and issues faced by other women and can communicate more openly with other women. In Bolivia, young women 17 to 25 years of age were trained in the proper maintenance of water and sanitation facilities as an adjunct to a training programme in primary health care²⁹. In Mexico, the initial success of village water supply in 1958, as well as its continued operation and improvement over two decades, is due in great part to young women who assisted in the early planning stage and then to local women whom they trained to become active members of the water committee³⁰. In Pakistan, women sanitation promoters were trained together with men promoters. One woman sanitation promoter observed. Only a woman can tell another village women how to keep her house, her street and her children clean, as well as to take care of the food they eat. If we succeed in convincing one woman, she can motivate other women and male members of their families, their friends an relatives³¹.

c) Attention to work with existing social structures

Too often, health/hygiene education are being looked upon as simply giving information through media, radio or posters. Experiences have shown that by merely bringing across messages is not enough to change the people's attitude and behaviors. Communications/information should be followed up by motivation and organization of the community to take actions to improve

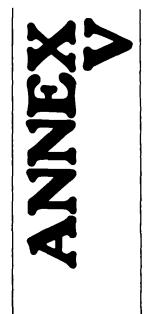
their environmental sanitation or change attitudes and behavior in order to improve their health condition. This could be done by strengthening of existing women's groups or the creation of new ones as necessary to build peer support for desired change. Community organization work should in fact focus a priori on existing structures and their enhancement. In addition to the enhancement of women's groups, other ways should be found to mobilize the more general community organization to take action in changing attitudes and behaviors in sanitation and hygiene.

One example is the Surigao Rural water supply project in the Philippines. Mothers Clubs organized activities to promote village sanitation, including latrines, garbage disposal, domestic and personal hygiene, even beautification of the village by growing flowers. Every year, a convention was organized and prizes offered to the village that has done best in environmental sanitation. The overall cleanlines of the villages was very refreshing³².

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Workplan of the Inter-Agency Task Force on Women and the IDWSSD July 1984-1986

At the 11th meeting of the Steering Committee for Cooperative Action-IDWSSD, the Inter-Agency Task Force on Women and the IDWSSD was requested to present to the 12th meeting of the Steering Committee a tentative work-plan in the area of women and the IDWSSD.

At the third meeting of the Inter-Agency Task Force on Women and the IDWSSD it was, therefore, agreed that member agencies of the Task Force submit to the Secretariat of the Task Force information regarding activities that each agency plans to undertake in promoting women's involvement in water and sanitation. Based on the information submitted, the Secretariat prepared this workplan. The time frame of the workplan covered activities planned for the later half of 1984 through 1986.

I. Activities to Involve Women in Operational Country-Level Programmes

a) UNDP is undertaking a specific project, INT/83/003, entitled "Promotion and Support for Women's Participation in the International Drinking Water Supply and Sanitation Decade", with financing from the Norwegian Government. The project has a major function to support activities of this kind in some ten to fiffteen countries. In many of these countries, UNDP will work together with other UN agencies in the implementation of this project. At this moment, the primary task of the project was the identification of potential country-level activities eligible for INT/83/003 support, follow-up action for their detailed design, and processing and approval of agreements for their implementation. Some of the countries and activities identified are as follows

1.1 Asia

Sri Lanka. A joint UNICEF/UNDP Mission recommended support to a UNICEF Water Supply and Sanitation Project in Anuradhapura District to test arrangements for strengthening women's involvement using the District Level Gramodaya Mandalaya mechanisms for inter-

WOMEN AND THE INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

Study prepared in accordance with the decision of THE INTER-AGENCY TASK FORCE ON WOMEN AND THE IDWSSD

UNITED NATIONS INTERNATIONAL RESEARCH AND TRAINING INSTITUTE FOR THE ADVANCEMENT OF WOMEN (INSTRAW)

THE UNITED NATIONS CHILDRENS'S FUND (UNICEF)

- Page 7. Paragraph 9. Line 6. "with the very specific role that women play as producers and users especially as mothers and..."
- Page 9. Paragraph 4. Line 1. "...Furthermore, some studies show that the sanitation sector is not usually assigned the same..."
- Page 12. Paragraph 4. Line 3. "...views and opinions are critical in this regard, especially regarding the choice of technology and site selection. Research should be carried out to adapt existing technologies and..."
- Page 12. Paragraph 5. Lines 4-5. "...attaining greater participation of women in water-related programmes."
- Page 13. Paragraph 3. "The question of women and water supply and sanitation was not duly addressed until the ninth meeting of the Steering Committee, held in April 1982 at which time the Committee acknowledged and endorsed the important role women could play in the implementation of the IDWSSD objectives and decided to establish an action-oriented inter-agency task force of the Committee to foster women's participation in activities of the Decade."
- Page 13. Paragraph 5. Line 2. "...terms of reference and the plan of action for the Task Force."
- Page 14. Paragraph 4. Line 3. "...meeting of the Steering Committee a tentative workplan in the area of women and the IDWSSD."
- Page 16. Paragraph 2. Line 3. "...tioned above to all UNDP Field offices requesting that it be brought to the attention of all..."
- Page 16. Paragraph 3. Line 19. "...handpump installation project; a UNDP/IBRD assisted Rural Sanitation Programme in Lesotho..."
- Page 21. Item I. 2. Line 1. "Review policies and practices at the international and national levels to develop..."
- Page 25. Paragraph 1. Line 4. "...gies but rather to highlight women's aspects in them."
- Page 29. Paragraph 4. Line 2. "...or poorly planned, leading to consequent neglect of the installations and eventual decline or..."
- Page 30. Item 2.1 Letter f. "Supporting national women's organizations, focal institutions or women's bureaus for..."
- Page 31. Item 2.3 Letter b) Line 1. "Conducting an appraisal of existing information services at the international level en-..."
- Page 33. Paragraph 2. Line 8. "...primary users and managers of water resources and as the principal influence on family sanitary..."
- Page 35. Paragraph 1. Line 6. "...example of how improved water supply can lead to multiple benefits and bring them into the development process. In some villages, women initiated health and..."
- Page 35. Last Paragraph. Line 7. "...bring water to the villages. The City Administration..."
- Page 37. Paragraph 3. Line 7. "...formed have women representatives among their most active members 8.

- Page 38. Paragraph 2. Line 4. "...privy by 1990. It is estimated that by 1984, 44% of rural households already had their own..."
- Page 40. Paragraph 1. Line 3. "...can help them later with operation and maintenance in their communities."
 - Paragraph 5. Line 2. "...system. In may communities, women had initiated steps to obtain the improved water system."
- Page 47. Paragraph 4. Line 3. "Supply project, INT/78/052, in Nusa Tengara Timur Province was identified. The..."
- Page 50. Point 9. Line 4. "...conditions as a result of installation of handpumps, thus relieving the traditional burden..."
- Page 51. Item VI. Point 3. Last line. "...ment, etc. can be obtained on request.

 This is relevant for recruitment purposes. DTCD".
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institutional co-operation including local NGOs. A proposal submitted by UNICEF includes support for the establishment of a local office of the Women's Bureau which would take the lead in identifying village-level women's organizations, and women volunteers to collaborate with the programme; and in developing and conducting relevant training courses for these women, and for officials of other Government agencies which are involved in collaboration with the sectoral ministries and NGOs. A final version of the proposal is awaiting Government clearance which is expected in the near future.

Bangladesh. A draft proposal received in January 1984 from the International Centre for Diarrhoeal Diseases Research, Bangladesh, for support to the second phase of their Urban Volunteer Project was reviewed in detail with a staff member of the Centre during his visit to New York in April. After further clarification and some adjustments, an agreement was signed on 31 May 1984. The two-year project will expand training for women volunteers from urban slum areas to cover improved hygiene and health related practices. The programme includes systematic research to measure its impact.

India. On a mission in May, an IBRD/TAG staff member reviewed with staff of a World Bank Rural Sanitation Project the possibilities of designing and testing a methodology for social institutional feasibility research to be carried out by an appropriate national institution in conjunction with this project. The focus would be on studying village communities to determine the feasibility of both institutions and individuals to participate effectively in low-cost sanitation schemes. Village level institutions to be examined would include panchayats, mahila mandals, farm cooperatives and particularly women's groups to see how well they can (a) generate support for the project, (b) administer and manage the scheme, (c) organize community self-help efforts, and (d) coordinate with other organizations involved. A draft proposal is awaited, and could probably be agreed before the end of the year.

Indonesia. In conjunction with November 1983 and May 1984 missions to evaluate impact of the Women's Decade in Indonesia, a potential support activity to a UNDP/WHO Rural Water Supply project, activity would develop and test complementary health education programmes aimed particularly at women, to be carried out in collaboration with the PKK (National Women's Organization) and Dian Desa (an NGO active in community development work). A contract with the latter organization for detailed design of the proposal was authorized in principle in June. It will be approved on receipt of draft terms of reference.

Nepal. A report was submitted in April recommending support to training activities of the UNDP/OPE assisted NGO IDWSS Decade Cell, a unit of the Social Services National Coordinating Council, and through their programme, to the Women's Development Section of the Ministry of Panchayat and Rural Development. The Government is currently reviewing the proposal as part of their country programming exercise.

1.2 Middle East

Yemen Arab Republic. Four alternatives for support to relevant projects (one UNDP/OPE, one FAO/Islamic Bank, on IBRD, one Dutch bilateral assistance) has been presented. A detailed proposal will be presented to the Government. It would focus on the design of a communication support and hygiene education strategy and training materials for use in conjunction with integrated rural development projects which include water supply and/or sanitation components. It will propose initial testing under the bilateral project, in close cooperation with the other three. It is expected that this proposal can be approved before the end of 1984.

1.3 Africa

Kenya. Support will be given to a national NGO, the Kenya Water for Health Organization (KWAHO), in promoting community participation, developing, testing and implementing training programmes for community women in health education and handpump maintenance, in associa-

tion with a SIDA-financed UNDP/IBRD rural water supply handpump testing programme in the Southwest Region. Assistance would also be provided for developing and testing a methodology for carrying out socio-cultural feasibility studies for other water supply and sanitation projects. A subcontract to the African Medical and Research Foundation (AMREF) a regional NGO, to provide this support and advice was negotiated and was signed at the end of August.

Lesotho. An agreement in principle was reached on support to the UNDP/IBRD Rural Sanitation Pilot Project LES/82/007 for the design and development of a community-based health education strategy for sanitation, the design, pretesting and development of health education and training materials, and preparing the sanitation component of training programmes for health workers, women's organizations and other extension agents who can promote sanitation improvements at the community level. A draft proposal and job description for a UNV and local community liaison officer are being finalized and it is expected that an agreement can be signed by October.

Niger. DTCD in collaboration with the Government of Niger is planning to organize a seminar to train women in the efficient utilization and conservation of irrigation water from ground water wells.

Senegal. DTCD in collaboration with the Government of Senegal is organizing a training programme for women in water protection and sanitation, irrigation techniques, pumps maintenance and repair.

Zimbabwe. A draft contract with Save the Children project in Bindura to expand and test a programme for providing health care training to women volunteer health workers in commercial farm areas, placing increased focus on water and sanitation related aspects is currently under negotiation. It is expected to be approved for immediate implementation in early September.

1.4 Latin America and the Caribbean

Nicaragua. A request was received in July 1984 from the Nicaraguan Water Supply and Sanitation Institute for assistance in orienting its training programmes to strengthen community/women's participation in water supply and sanitation schemes. A proposal will be forthcoming.

b) WHO is planning country activities as follows:

Thailand. Support to Thailand project "Women in Health and Development — promotion of women as health care providers of family and community" to cover environmental health and sanitation in training courses.

Jamaica. Addition of managerial aspects of water and sanitation to training courses in management, leadership and communication (related to WHO sponsored multinational study on women as health care providers) which would complement training courses on water and waste management and the certification course in water management.

Colombia. Development of a component on women and water as follow up to country activities aimed at preparing female health workers for position of leadership in the formal health sector.

11. Workshops and Follow Ups

1. Following the Interregional Seminar on women and the IDWSSD convened by INSTRAW in Cairo in March 1984, the Institute will publish the report and proceedings of the seminar, which will be issued as a United Nations sales publication in early 1985, a booklet containing the recommendations of the seminar will also be published. Moreover, based on the results of the seminar, training materials will be developed in cooperation with other agencies, *INSTRAW*

- Following a workshop held at UNDPHQ from 21 to 28 February 1984 with participa-2. tion of six technical authorities in the field of evaluation of socio-cultural aspects of water supply, sanitation, health and women in development projects, a Workshop Report was drawn-up presenting recommendations concerning the process, procedures and methodology for case studies, including use of the MEP for measuring impact on functioning and use of water and sanitation systems. On this basis, project personnel are currently finalizing draft guidelines which focus on content of studies, data gathering instruments and methodology. An Agreement is now being finalized with the UNDP/WHO-executed regional project RAS/81/024, Advisory Services on the IDWSSD, to carry out case studies, using the draft guidelines as a basis, in four Asian countries where INT/83/003 expects to have activities (Indonesia, Nepal, Sri Lanka, Thailand). The studies will be carried out by national research teams, who will meet at regional workshops in the beginning, mid-point and end of their work. Government authorities and staff of the INT/83/003-supported country projects will also participate in the workshops. It is also expected that the draft guidelines will be tested on case studies being undertaken in conjunction with INT/83/003 in other regions. UNDP
- 3. Second Inter-country Workshop for the IDWSSD Advisory Services project to review case studies that have been carried out to be held 20-24 August 1984 in Kuala Lumpur. **WHO**
- 4. First Workshop for Principal Investigators involved in evaluation of women's interventions to be held Jan. 1985 in Bangkok. *WHO/UNDP*

III. Publications of Researchs and Studies and Documentation of Case Studies:

- 1. An annotated bibliography and Literature Review on Women's Roles in WSS, being undertaken in collaboration with the IRC, the Hague. (Based in part on identification and classification of over 200 additional documents and other works containing potentially relevant materials not included in previous bibliographies carried out by a project consultant). *UNDP*
- 2. Paper entitled "Women and Irrigation". The paper will partially deal with drinking water, but only as related to irrigation. The paper is a contribution from the Water Resources Development and Management Service to Women in Agriculture Production and Rural Development Service Series of "Women in Agriculture". *FAO*
- 3. Booklet on Women/Irrigation/Drinking Water/Sanitation and their Inter-relation. *FAO/WHO*
- 4. Booklet on "Women and Water and Sanitation". WHO
- 5. Paper on "The Role of Women's Organizations in Primary Health Care: With Emphasis on Maternal and Child Health and Family Planning and Safe Water and Basic Sanitation", WHO
- Case studies and experiences of UNICEF-assisted water supply and sanitation projects in Sri Lanka where women actively participated and have made some impact on the success of the project. UNICEF/UNDP
- 7. Methodology on how to integrate hygiene education and health education component in water supply and sanitation programmes in the context of primary health care. This will be developed first in Indonesia and Guyana. *UNICEF*.
- 8. Preparation of a document entitled, "Recruitment of women for Technical Coopera-

tion Activities of the UNDTCD", a working paper to be submitted to the meeting of national recruitment services and DTCD, held in Geneva from 24-28 September 1984. **DTCD**

- 9. Based on the evaluation mission for DTCD project MLI/82/005 and NER/79/006 to assess the impact of ground water projects on women and economic and social life in villages, which concluded very positive improvement in women's economic and living conditions as a result of installation of handpumps, thus releving the traditional burden of obtaining water particularly for pregnant women and having a generally positive effect on the health of women and infants and richer protein in mother's milk, similar evaluation studies are planned for projects in Gambia, Guinea Bissau and Burkina-Faso (formerly Upper Volta). DTCD
- 10. Within the United Nations Educational, Scientific and Cultural Organization (UNESCO), activities in the field of drinking water supply and sanitation are part of the Division of Socio-economic Analysis. The Division is preparing a series of studies in different socio-cultural contexts to identify concrete problems preoccupying women and to determine their priorities at the local, regional and national levels. The results will be compared with national development plans, a conceptual and methodological framework will be elaborated and an international expert group meeting organized in 1985 to suggest pilot policy projects aimed at women's problems. UNESCO

In addition, two pilot projects will be launched in 1984-1985. The first deals with the integrated administration of water resources in urban and rural systems, the other focuses on the participation of local population, especially women, in the improvement of their living conditions. *UNESCO*

- 11. Issue No. 14-15 of *Appropriate Technology for Health* newsletter (of the WHO Division of Strengthening of Health Services) devoted to water. *WHO*
- 12. Paper on women's involvement in water supply and sanitation to be submitted to the Steering Committee October 1984. *UNICEF* and *Task Force participating agencies*.

IV. Preparation of Guidelines, Technical Notes and Training Materials

- 1. Review of guidelines and audio-visual training modules prepared under the UNDP/ World Bank-executed project for Preparation of Training Materials on Low-cost Sanitation Technologies, recommended detailed specific modifications to ensure adequate attention to women's involvement. *UNDP*
- 2. Draft Guidelines for Case Studies Assessing Impact of Women's Participation on WSS projects, produced by a Workshop on the subject organized in February 1984. *UNDP*
- 3. It was agreed with the Water and Urban Department of the IBRD to collaborate with them in the preparation of two Technical Notes aimed specifically at project planners and managers, concerning planning of women's aspects of low-cost sanitation projects and of drinking water supply projects. The Notes will focus on women's roles in various project phases: design, implementation, operation, maintenance, utilization, financing and health education. The first and second drafts of the Note on Sanitation have been reviewed and it is now being finalized for publication. A draft of the second Note will be submitted in September, aiming at finalization for printing in December 1984. The work is being carried out by a consultant, Dr. Heli Perrett, and is being coordinated with the work being undertaken by IRC. UNDP/IBRD
- 4. A parallel Note on Women's Dimension in Water Supply Projects Planning. UNDP

V. Evaluation

- 1. Mission for DTCD projects MLI/82/005 and NER/79/006 to assess impact of ground water projects on women. Very positive improvement in women's economic and living conditions as result of installation of handpumps. Similar evaluation studies planned for projects in Gambia, Guinea Bissau and Burkina-Faso (formerly Upper Volta). *DTCD*
- 2. Evaluation performance of women caretakers of Bangladesh Rural Water Supply Project. *UNICEF/DANIDA*

VI. Others

- 1. Establishment of a network for cooperation with activities of United Nations system agencies involved in the water sector, including IBRD, WHO, UNDTCD, UNICEF, ILO, as well as bilateral programmes, NGOs and specialized institutions and individuals. *UNDP*
- 2. Identification of a roster of over 200 consultants and institutions with relevant capabilities in women's involvement. *UNDP*
- 3. UN computerized roster of applicants for positions in technical cooperation activities. A printout of current female applicants for positions in water, community development, etc., can be obtained on request. This is relevant purpose. *DTCD*
- 4. Participation in the World Conference of the UN Decade for Women to be held in Nairobi, 1985. A background paper of UN agency activities in promoting and supporting women's participation in IDWSSD activities will be prepared and submitted to the Conference. A panel on "Women and Water Supply and Sanitation" will be organized and conducted during the NGO Forum, which will be held concurrently to the World Conference in Nairobi 1985. INSTRAW and Participating agencies of Task Force.



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