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FINAL REVIEW OF CASE-STUDIES OF WOMEN'S PARTICIPATION
IN COMMUNITY WATER SUPPLY AND SANITATION

Report on a Workshop

Kupang, Indonesia, 23-27 May 1988

WHO Project: ICP CWS 005
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SUMMARY

Provision of safe drinking water supply and safe sanitation are complementary to the social objectives of WHO's global strategy for achieving health for all by the year 2000 through primary health care. The global strategy was endorsed in 1979 by the Thirty-Second World Health Assembly. A year later, the General Assembly of the United Nations designated 1981-1990 as the International Drinking Water Supply and Sanitation Decade (IDWSSD). The targets of IDWSSD were to provide drinking water and sanitation services to all by 1990. From the very beginning of the Decade, community and women's participation were recognized as important for the success of rural water and sanitation programmes. In 1980 the World Conference of the United Nations Decade for Women adopted a special resolution recommending incorporation of women's activities in their programmes, and in 1982, the Steering Committee for Cooperative Action decided to establish an inter-agency task force to involve women at the policy-making, management and technical levels of planning, monitoring and evaluation of existing and future Decade activities.

To provide emphasis on women's participation in water supply and sanitation programmes and to demonstrate to policy makers and implementors how this can be achieved, a UNDP assisted global project "Promotion of the Role of Women in Water and Environmental Sanitation Services (PROWESS)" began to operate in 1983 and is scheduled to continue till the end of 1990. Country activities aimed at demonstrating how women can be actively involved in water supply, sanitation and related health education are underway in ten countries (Bangladesh, Egypt, India, Indonesia, Kenya, Lesotho, Nepal, Sri Lanka, Thailand and Zimbabwe). In 1983, through an inter-agency agreement, case-studies to document the experience in involving women in water supply and sanitation programmes were initiated in four countries of WHO/SEAR (Indonesia, Nepal, Sri Lanka and Thailand) by UNDP/PROWESS, with WHO/SEARO as the executing agency.

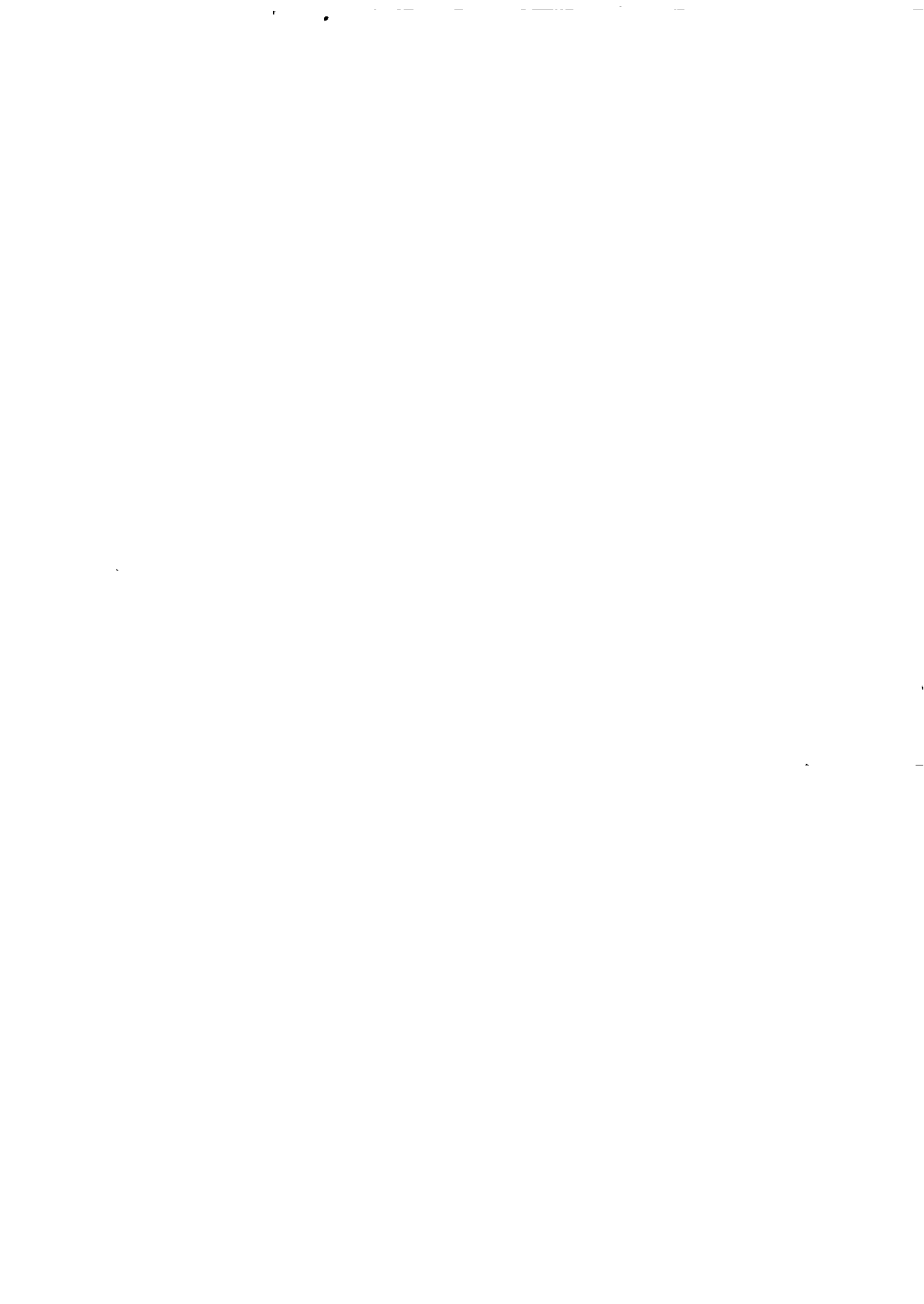
The case-studies documented findings of the research teams and measured women's participation, both before and after the initiation of intervention programmes. Three regional workshops were held to bring together UNDP/PROWESS and the SEARO, the participants in case-studies (research and intervention teams of the four selected countries), and the governments concerned at the initiation (1985), mid-point (1986) and conclusion (1988) of case-studies to agree on methodology and to review together both the process and the findings of the case studies. The present document is the report of the final workshop.

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CENTRE FOR COMMUNITY WATER SUPPLY
AND SANITATION (IRC)
P.O. Box 93190, 2509 AD The Hague
Tel. (070) 814911 ext. 141/142

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1. INTRODUCTION

The third and final intercountry workshop on Case Studies of Women's Participation in Community Water Supply and Sanitation, organized by SEARO, was held in Kupang (Indonesia) from 23 to 27 May 1988. This report provides the background of the project, the objectives of the case-studies component, the objectives and findings of the two previous workshops, and the report on the final workshop.

1.1 Background of the Project

In 1983, UNDP/PROWESS (Promotion of the Role of Women in Water and Environmental Sanitation Services) technically and financially supported action projects in Indonesia, Nepal, Sri Lanka and Thailand as part of the efforts to show how women's participation can be achieved in water supply and sanitation projects.

UNDP/PROWESS is a programme designed to demonstrate how women's participation can be achieved in water and sanitation projects of the International Drinking Water Supply and Sanitation Decade (IDWSSD), and how this will improve the effectiveness of these projects. The programme has been operating since 1983 and is scheduled to continue through the end of the Decade (1990). Funding is provided by Norway, Canada, the USA, and Finland, and UNDP.

Intervention/action projects in the four countries in SEAR were established through contracts entered into with local institutions directly by the UNDP in these countries in consultation with the Project Manager, PROWESS Project. In order to obtain good data on the effect that these projects had, four case-studies in these same countries were also funded from UNDP/PROWESS, with WHO as the executing agency in 1983.

1.2 Objectives of the Case Studies

The objectives of the case-studies were to:

- (a) collect baseline data on communities targeted for implementation activities that would be useful in the design of a project where women, as actors and target groups, can contribute to water supply and sanitation schemes;
- (b) develop measures of women's participation in the activities, including new data gathering methods where possible, and
- (c) conduct post-intervention studies on the economic, social and health impacts of the interventions on the community and the degree to which women's involvement was achieved.

1.3 Role of the Regional Office

The Regional Office (SEARO), as an executing agency, sub-contracted institutions in four countries in the Region for case studies, whereas the UNDP/PROWESS Project INT/83/003 provided direct support for intervention components in selected water supply and/or sanitation projects (Indonesia, Nepal, Sri Lanka and Thailand). Case studies on promotion of women's participation in community water supply and sanitation projects in each of the selected areas in the four countries were prepared over a two-year period. The first year was utilized for collecting baseline information as background data for the mid-course workshop, and the second year for documenting the interventions and carrying out a final evaluation of the degree of women's participation achieved. SEARO was also responsible for bringing together the personnel of the case-study institutions, the implementing agencies, and the government agencies concerned, at the initiation, mid-point and at the conclusion of the studies, to agree on a common methodology, and to review together both the processes and the findings of the case studies.

1.4 Institutions Contracted for Case Studies and Interventions

SEARO sub-contracted with the institutions named below to conduct one case-study in each of the countries:

Indonesia	PKK (Family Welfare Movement) Nusa Tenggara Timur (NTT)
Nepal	Consulting Firm: Integrated Development Systems P.O. Box 2254 Baneshwar, Kathmandu
Sri Lanka	Consulting Firm: IRED - Development Innovations and Networks 64, Horton Place Colombo-7
Thailand	Faculty of Social Sciences and Humanities Mahidol University, Salaya, Nakorn Pathom

UNDP/PROWESS made sub-contractual arrangements for the intervention studies in these four participating countries. The organizations and locations for interventions are indicated below:

<u>Country</u>	<u>Institution</u>	<u>Location of Intervention</u>
Indonesia	PKK (Family Welfare Movement) Nusa Tenggara Timur (NTT)	Nusa Tenggara Timur Province Villages: Silu, Takirin, Sarabau & Naunu
Nepal	Women's Development Section Ministry of Panchayat and Local Development, Kathmandu	Gajuri Panchayat in the Central Region and Fikkal Panchayat in the Eastern Region

Sri Lanka	Women's Bureau Ministry of Women's Affairs and Teaching Hospitals Colombo-3	Anuradhapura District Case study villages: Kadawalagama, Horagoda, Habarakada, Upper Mellankulama, plus 91 more villages not covered in the case study
Thailand	The Girl Guides Association of Thailand 5/1-2 Phyathai Road Bangkok-4	Surin Province: Ban Bok Ban Samrong, Ban Kwaonoi, Ban Nonkortong Villages; Srisaket Province: Ban Jiangwong, Ban Phapa Villages

1.5 Previous Workshops

Two case-study workshops were held in Bangkok from 26 to 31 May 1985 and in Kathmandu, Nepal, from 12 to 19 September 1986. These were attended by case-study and intervention teams, staff of WHO (HQ and SEARO) UNDP/PROWESS, and observers from governmental and international agencies.

Bangkok workshop

The objectives of the Bangkok workshop were to:

(a) foster an understanding among participants regarding the objectives of the case-studies and interventions, and the methods and approaches to be used in carrying out the case-studies and interventions, and

(b) review the guidelines for case-studies on involvement of women in water supply and sanitation projects.

The following was the outcome of the Bangkok workshop:

(a) Through plenary sessions and small group activities, a common understanding was reached among participants, resource persons and the secretariat regarding the objectives of the case-studies and interventions and the methods and approaches to be used in carrying out the case-studies and interventions.

(b) Case study protocols for the four participating countries were drafted and modified through small group discussions.

Kathmandu workshop

The objectives of the Kathmandu workshop, which was a mid-term one, were to:

(a) exchange information and share experiences between case-study teams in different countries, highlighting the methodological difficulties, successful remedies, findings and observations;

(b) refine or develop investigative and evaluative methods on the basis of baseline surveys and preliminary findings, and

(c) based on the preliminary findings and observations to date, identify case-study research components which are most or least helpful to intervention agencies in the analysis and evaluation of ongoing experience. This will facilitate their determining the long-term effectiveness and replication of different intervention strategies utilized in promoting women's participation in water supply, sanitation and health improvements.

The outcome of the Kathmandu workshop were two sets of recommendations, one by the case-studies group and the other by the interventions group.

The case-studies group recommended that (a) they should research broader issues than just the information needed by the intervention teams, without mentioning sector or organization; (b) case-study interviewers need letters of introduction; (c) cultural solutions to achieving good cooperation between the case-study and intervention teams can be found; (d) the two teams should meet regularly together, but hold less frequent meetings with outside agencies to inform them about decisions taken on procedure and results to date, and (e) funding agencies should use their field offices to ensure that both teams are fully informed about the total project, to facilitate communication, and to provide feedback and follow-up without delays. The case-study team also recommended types of data that are required on water (water sources, quantity, quality, uses and time involved in water related activities), sanitation, and women (seasonal workload and time use, division of labour, decision making, and access to services).

The intervention group recommended that (a) easily accessible villages should be selected to facilitate project activities; (b) steering committees should be formed to facilitate discussions between case-study and intervention groups; (c) case-study teams should provide all necessary information to intervention teams in specific terms, and case-study people should reach the people at the grassroots level to obtain correct information; (d) the project period should be extended to two or three years, since one year is too short to effect an impact, and (e) individual participating countries should design a strategy to continue the activities even after the donors have withdrawn from the project.

2. FINAL REVIEW WORKSHOP

2.1 Objectives

The objectives of the Workshop were to:

(a) review the findings, including the processes, the end results and the effectiveness of the interventions for both functioning and utilization of improved water supply and sanitation facilities through women's participation and the impact of their well-being;

(b) draw conclusions and recommendations, on the basis of the findings, for the design for the future interventions;

(c) review case-study methodologies employed in the project highlighting difficulties, remedies, successful approaches and observations, and

(d) develop and recommend case-study methodologies to promote women's participation in water supply and sanitation projects in future.

2.2 Programme

The agenda of the workshop and tasks for the group work are in Annexes 1 and 2 respectively.

2.3 Participants and Venue

The workshop was attended by representatives from the case-study and intervention teams from Indonesia, Nepal, Sri Lanka and Thailand, the Ministry of Health of Indonesia, officials of the Health and Planning Departments of NTT province, UNDP/PROWESS, WHO and observers from UNICEF and USAID, Jakarta. A list of participants is in Annex 3. The workshop was organized by SEARO and hosted by the Government of Indonesia through the PKK in Kupang, NTT. Dr Nafsiah Mboi is head of the PKK of NTT province and led the Indonesian activities under this project. Thirty volunteers from local women's organizations, civil servants and expatriate women as part of the workshop organizing committee assisted in the conduct of the workshop.

The workshop was held and the participants were accommodated in the facilities of the Kupang Gedung Wanita, a women's training centre newly built through the combined efforts of several women's groups in Kupang.

2.4 Field Trip

On Monday, 23 May, the participants and observers went on a field trip to the village of Takirin, a PKK intervention site in central Timor. In an interview during the visit the women villagers mentioned how they organized and managed the groups and developed group membership, the system(s) they use for collecting the dues they decided upon and the sanctions used against those not paying their dues; the new activities they carried out since their groups started functioning; benefits they and their families derived from the new improved supply and problems encountered in their new activities and roles. The village leader thanked the PKK for its assistance in obtaining clean and abundant water which has resulted in the growing of vegetables and fruit trees which has increased their income. The women were satisfied that they had more possibilities for bathing and cleanliness in the household and enjoyed this new level of cleanliness. During the field trip the participants and observers also attended a presentation by the seminar of fingerlings to improve fish stock in the village.

2.5 Key Addresses

The workshop was opened on 24 May by Dr (Mrs) Nafsiah Mboi, followed by speeches by Mr M.L. Gupta of SEARO, and Mrs Siri Melchior of UNDP/PROWESS, New York. Dr Leimena, the Director-General, CDC&EH, read out an address from the Minister of Health of Indonesia. The Governor of NTT delivered the inaugural address.

The Minister of Health in his address stated that in Indonesia the entry point in villages for primary health care is through the PKK. The PKK has done such a good job in supporting primary health care that in May 1988

the organization received awards from UNICEF and WHO. The importance of involving women in water supply and sanitation activities cannot be overemphasized. He also drew attention to the proceedings at the Forty-first World Health Assembly which emphasized the importance of leadership to facilitate cross sectoral coordination and the need to accelerate the implementation of the primary health care approach. Both issues are relevant to the implementation of water supply and sanitation. In Indonesia, a national strategy is needed with a comprehensive approach that seeks ways to integrate water supply and sanitation activities with posyandu (integrated services posts) so that water supply and sanitation can be developed as elements in primary health care. Also, the role of women in every phase of development should be clearly defined and planned.

2.6 Main Working Session

Dr (Mrs) Nafsiah Mboi was elected chairperson, and Dr Saroj Jha rapporteur. After some discussion, the agenda was adopted. An additional objective to produce guidelines for women's involvement in water supply and sanitation was discussed, but it was decided not to include this item as there was not enough information or time at this workshop to produce guidelines. Also, two case-studies had no follow-up studies for evaluating effectiveness of interventions.

An overview of the experience on women's participation in study areas and issues for further discussion during the workshop were presented by Dr Mayling Simpson-Hebert, WHO consultant. The overview presented was the result of the analysis of the case-study reports from the four participating countries by the Consultant. A summary of the main points are given below.

- (a) Women's participation meant community participation; in other words, the two concepts cannot be separated and community participation without women's participation is not a true community participation.
- (b) In all projects, men and women must work together. In emphasizing women's participation, it was important also to recognize the role of men and work within the institutional structures of the village. Under these conditions men seem to welcome women's participation, and after only one year their esteem for women increased. It was found to be easy to change men's notions about the intelligence and importance of women.
- (c) If women's participation were to be achieved, then special emphasis must be placed on women. If this emphasis was not there, then men and women will continue to behave in their old stereotyped roles with men taking the lead.
- (d) For the most part, women's organizations in rural Asian societies are weak. Achieving women's participation often means strengthening these institutions.
- (e) It was important for agencies working towards women's participation to take a facilitating role, rather than a leadership role, to achieve self-reliance of communities and sustainability of project results. When outside agencies take a facilitating role it enables communities themselves to take the lead, and in the end they feel responsible themselves for the project. This was more likely to result in a sustainable project.

(f) There were strong cultural constraints to women's participation in Asian societies, such as attitudes about women's intelligence and capabilities, women's lower educational attainment and lack of broad experience outside the home, cultural and religious environment about women's work and men's work, and women's lower self-esteem. There was a need to understand these better and find ways to overcome them.

(g) There were important links among women's income, women's status and women's participation. As women earn more income, their status within the household and the community rises and they themselves are more willing to participate and lead. Would it be wise to recommend that all such projects have a component of income-generating activities for women?

(h) There are many positive spin-offs to women's participation, such as income-generating activities, and increased nutritional and health benefits to families and communities. These always need to be reported in evaluations.

(i) There was a need to develop better ways to measure women's participation and set specific objectives and goals. To do this, it might be necessary to map the women's cultural landscape in order to identify not only women leaders, but also disadvantaged women who might be left out of participation due to caste, social or economic class, religion or other factors.

(j) For projects of this sort to work, water supply and sanitation must be a high priority in villages. If they are not priorities, it may be necessary to meet higher priorities of the villagers first.

(k) The case-study reports provide too little information about the processes, links and coordination at the highest levels that are necessary to get these projects started and to continue activities into the future. Such information can be discussed at this workshop.

(l) There was a need to identify which case-study methods used were the best, which did not work well, and what were the best measures to gauge women's participation. There was also a need to identify the minimum baseline information and easy measures of women's participation and community participation so that the gap between the social sciences and engineering could be bridged.

The above presentation was discussed by the participants. The case-study participants underlined the need to use the workshop as a good opportunity to examine case-study methods - an objective that should not be lost.

3. REPORTS FROM CASE STUDY AND INTERVENTION TEAMS

3.1 Summary

Case study and intervention teams reported on their progress and findings. Summaries of their reports, followed by fuller explanations, are in Annex 4.

The Indonesia case-study and intervention teams felt they had had a very successful case-study and intervention. The project had achieved

women's participation in the four site villages through strengthening of local PKK groups at the provincial, district and village levels. Community water user groups had been formed and were active. The groups felt responsible for their achievements. Women who were shy before were now outspoken and active. Both women and men in the villages hold women in higher esteem than before. Several new water points had been established and were being well-maintained by the communities, and monthly water charges were being collected by the community. Some interesting spin-offs had occurred as a result of the project, such as increased growing of household vegetables, despite a drought, and spread effects to other villages not involved in the project. The case-study had successfully developed new participatory approaches to data collection both in the training of field workers (who helped to develop research instruments) and in the involvement of villagers in data collection. Many new ideas about participatory methods of research were presented.

The Nepal case-study work ended at the baseline survey. Thus, the intervention experience is missing in the case study. Intervention has now begun in one village, Melamchi, not included in the original baseline case study, but later added to the UNDP-funded interventions. UNDP provided assistance on software components of the project through a training of trainers workshop, involving staff and rural women. The Nepal intervention team expects construction in the three sites to be finished in the next fiscal year (July 88 - July 89).

Sri Lanka was represented only by the intervention team from the Women's Bureau. The representative from the Women's Bureau reported a great deal of progress in involving women in UNICEF-assisted basic services project in Anuradhapura and were pleased with the project results. Work was carried out so far in 95 villages, training of 400 female health volunteers in health, water and sanitation activities, training of 50 women facilitators and establishing 15 gramodaya health committees. The project, which has many components, has accomplished the construction of 1 222 latrines in the project area. The Women's Bureau sees continuing involvement in UNICEF-assisted projects.

In Thailand, case-study and intervention teams also felt they had had a successful case-study and intervention. The project covered in six villages, with one village, the smallest and most isolated, achieving 100% latrine coverage and boiling of water. The other villages had also made progress, though less impressive. The case-study team reported that they had successfully informed the intervention team about baseline information, which had been quickly produced within six weeks of project start-up. Longer term participant-observation research continued, feeding more information to the intervention team. The case-study team served to keep the intervention team "on track", as the girl guides development programme in villages has many components and activities, water and sanitation being only one of them. Progress had been made on involving women in development activities, with women now coming out, attending meetings and listening. This is progress over what had occurred before, when women would not come out at all. Many traditional constraints to women's participation still need to be overcome and this takes time. Men held women in higher esteem than before, one year after the project. The case-study and intervention teams had worked together closely throughout the project, which was taken to be a key to success.

4. REPORTS FROM GROUP WORK

4.1 Objectives and Process of Group Work

The purpose of group work was for case-study participants to meet as a group and for intervention participants to meet as a group to discuss common issues and to produce lessons learnt and recommendations from their collective experiences that may be applied to future case-study and intervention projects of this type.

To assist in this process, SEARO had prepared in advance a set of questions, called "Group Work Tasks", that would be answered first through self-analysis by each country team, and then by participants in intercountry groups. The group work tasks contained questions both on case-study methods and on interventions. The groups were asked to use these questions as a means of stimulating discussions on key issues and to come up with lessons learnt and recommendations for future projects of this type. The groups were asked to focus on questions that pertained to their group - thus the case-study group focussed on questions pertaining to case-study methods while the intervention group focussed on questions pertaining to interventions. In addition, the WHO Consultant and the UNDP/PROWESS Project Manager devised a supplementary set of questions and assumptions for examination by the case-studies group. These groups met for one-and-a-half days. On the final day of the workshop, the two groups reported their findings.

4.2 Report from Case-Studies Group - Lessons Learnt

The case-studies group presented the lessons learnt from an examination of case-study methods used in the four countries. The case-study group felt that it would be most appropriate to present its findings as a set of alternatives, with pros and cons, since each situation could call for a different approach.

The case-studies group agreed that data collection was very difficult. No matter how much one tries to simplify the techniques, expertise in social science is still needed for research design, data analysis and reporting of the findings. This is not something that can be done by people with little or no training in social sciences. Thus, the primary task of this group is to provide guidelines and suggestions to social scientists and others who might find themselves doing social sciences research for water supply and sanitation projects. The group will try to provide short-cut methods and adaptations of anthropological, sociological and psychological techniques to get information for planners that is quick, reliable and relevant. The emphasis will be on rapid appraisals that can provide immediate feedback as well as longer term research methods that can check for reliability of the rapid appraisal methods, such as quick surveys.

4.2.1 Institutional arrangements

An environment should be created so that the relationship between agencies, donors and researchers is intimately interlinked and more likely to succeed than be problematic. Several factors need to be considered in creating this environment.

(a) There are advantages and disadvantages in different types of institutions that may be chosen to conduct the social science research.

(1) Private research institutes and consulting firms

Advantages: They can be very professional, work quickly and provide rapid feedback.

Disadvantages: They can be too busy to give sufficient time to the research and they may not feel a personal stake in the successful outcome of the project.

(2) Government research institutions

Advantages: They may feel more dedicated to the success of a government project.

Disadvantages: Due to low government salaries in some developing countries, they may not be able to attract the best researchers and morale may be low.

(3) Universities

Advantages: They may feel a personal vested interest in taking on the research because it brings in money to the university, the faculty and students have an opportunity for field research and experience, and the field site can be used to further train students. The faculty also tends to be very dedicated to quality research.

Disadvantages: Universities have their own work schedules which can be very time-limiting, such as scheduling for examinations, semesters and vacations. The university faculties tend to be quite busy with many duties besides research, such as heavy course loads and administrative duties. They may have difficulties in scheduling field time or meeting report deadlines. Also, faculties are often restricted to choosing from only their own students for research assistants, which may be limited in number, may not have enough female students who are available, and may not necessarily be appropriate for the job.

(4) Individuals

Advantages: If individuals are contracted to work only for the project at hand, they will give it their undivided attention. If chosen well, individuals can be highly qualified and dedicated professionals who enjoy contractual work and will work hard for the project. They will be undisturbed by other duties.

Disadvantages: If the individual should leave the project before the work is completed, there is no one to fall back on, no institutional support to see to it that the job is completed.

(b) Contracts between intervention and case-study institutions need to spell out carefully the roles and responsibilities of each in order to ensure successful interaction. Such contracts need to specify (1) the accountability of the case-study organization to the users of the data (the implementing agency); (2) the accountability of the case-study and implementing organizations to project donors; (3) a time framework for data collection and report production, and (4) the responsibility of the case-study institution to provide quick information feedback to the implementing agency even before formal reports are written so that planning and implementation may proceed in an informed way.

(c) Overall, an environment that is more likely to succeed, based on these case-study experiences, is the one where anthropological data collection and implementation are conducted under the auspices of one organization. There may be some loss of objectivity on the part of the researchers, but the advantages seem to outweigh the disadvantages.

(d) Institutions conducting case-studies should have access to health, social science and technical expertise, though all disciplines do not necessarily need to be represented on a full-time or permanent basis on the research team.

The entire research framework should be developed in consultation with users and planners (intervention organizations). Both the case-study or research team and the intervention team need to understand the basic requirements and limitations of the other in order to arrive at mutually acceptable solutions. The two groups need to agree upon:

- (1) the timing of field work for data collection and how it interlocks with implementation phases;
- (2) the types of data to be collected;
- (3) methods to be used for data collection;
- (4) timing and methods of feedback in order to decrease the timelag between data collection and feedback. (For example, data collection could begin with a quick survey with quick tabulation and feedback. This would be followed by more in-depth probing, more qualitative research and more precise tabulations to verify early reports.), and
- (5) understanding the context and constraints to the research. Such constraints may include institutional policies that may limit access to more appropriate field workers, difficulties in geography or settlement patterns that may be widely scattered, the presence and utility of an existing information base from other sources (government, NGOs, other donors, etc.) that may have errors or incomplete information, the resources available to conduct the research.

4.2.2 Minimum needs for data collection

The group identified the minimum data needs for a water supply and sanitation project that promotes women's participation. Not all of these need to be collected for all projects, or all areas of a project.

(a) Mapping

- (1) mapping village facilities and their condition;
- (2) mapping the cultural geography of facilities used. Lines can be used to identify which families use which water sources and sanitation facilities, darkened lines or multiple lines to indicate how often, and coloured lines to indicate who goes - man, woman or child);
- (3) mapping the cultural landscape of village women in order to identify power groups and disadvantaged groups. (Different coloured dots can be used to map the locations of women by status, power or leaderships, wealth and ethnicity).

Maps should be used to communicate visually to planners what might otherwise be represented in a tabular form, with its relevance for community participation thereby being lost.

(b) Descriptions of community organizations and implementing agencies, their structures, purposes, functioning, effectiveness, leadership, and activities.

(c) Demography and socio-economic data, including family income (using proxies for estimating income are recommended, such as possession of farming tools; house size, type and building materials; self-rating of relative wealth) and women's income and production activities (for sale and home consumption).

(d) The number, type, functioning and maintenance of water and sanitation facilities.

(e) Use of water supply and sanitation facilities and installations including information as to who uses them, the number of water trips, time taken to fetch water, and whether water collection and places for defecation are a problem.

(f) Information on the health status of the community:

- (1) diarrhoea and other water and sanitation related diseases. There is difficulty in getting reliable morbidity and mortality data. One can try to use secondary sources, but there is always the problem whether to try to collect and use such data given the difficulties involved, especially for diarrhoea.
- (2) water quality - faecal coliform counts are an important measurement.

- (3) health-related behaviours, hygiene practices, health knowledge.
- (4) the state of household and village environmental sanitation, general cleanliness scales can be developed (such as presence of flies, faecal material from animals or humans inside the house, animals kept inside).
- (5) water handling and storage practices.
- (g) Women's and men's perceptions of themselves and of the opposite sex.

Participatory methods of data collection were found to be effective, especially for socially sensitive issues, in order to get accurate data in a short period of time, using games, simulations, pictures, puppets, pocket charts and the like. Examples of socially sensitive issues are attitudes and feelings as to how people value the work they do, how men or husbands value women, self-esteem or self-confidence, the value of women's judgement, health behaviours.

4.2.3 Sampling techniques

Emphasis should be placed on using simple sampling techniques, while being sure to include all groups of people in the community. One should not worry too much about getting a large sample size or doing fancy statistical testing. What is important is getting a good representative population and doing simple tabulations of findings. All groups of people need to be sampled, according to wealth, gender, education, age and other parameters.

The time frame for a rapid appraisal could be two to three weeks, depending on the scale of the project. If the project is very small, like a single simple system, the whole case-study could be done in a few weeks, but if it is a large one, it may need a few months. The field work could be done in perhaps two weeks. The length of time needed to do the case-study may also vary based on the constraints of the institution doing it.

4.2.4 Selection and training of field workers

There are a number of points to be considered in the selection, training and supervision of, and payments of monetary incentives to, field workers.

(a) In the selection of field workers there are advantages and disadvantages to using all males, all females or mixed teams.

- (1) Male, female and mixed teams

Males may be more willing to endure certain hardships of village life. Female field workers may be the only ones admitted into homes in some cultural areas. Mixed teams may be ideal in overcoming various cultural constraints based on sex.

- (2) Ideally, all field workers should be fluent in the local language. However, sometimes field workers not fluent in the local language can request more careful explanations

of practices and beliefs due to his/her language problem and thereby get more information.

- (3) There are advantages and disadvantages in using field workers with previous village field work experience and using those who are inexperienced. Experienced field workers are more prone to fill in the questionnaires themselves, as they think that from their previous experience they already knew the answers. New, inexperienced field workers tend to be fresh and eager to learn and are less likely to answer the questionnaires themselves.
- (4) It is best to use field workers who are of the same income level as the villagers because they can identify well with each other.
- (5) There are also advantages and disadvantages to using "insiders" and "outsiders" as field workers. "Insiders" do not have to spend time building rapport, but they may have biases or "enemies" in the village. "Outsiders" may have some difficulty in being accepted by the community, but they can be more objective, have less bias, and can ask "silly" questions that insiders cannot ask, for it is assumed that the "insiders" knew the answer.
- (6) The most important quality to look for in the selection of field workers is motivation. They must be motivated to do quality work, be eager to learn, willing to learn, willing to work in the field. Motivation is not a static quality, and can be nurtured by measures mentioned in the following, e.g., feedback mechanisms.

(b) Field workers should be trained and oriented clearly about the objectives and scope of the project, both the objectives and uses of data collection and the objectives of the intervention. They should understand the roles and responsibilities of the different agencies involved.

(c) It is very difficult to train a field worker in "common sense" and "good judgement", so close supervision and means of quick communication and feedback of field data between the field workers and the supervisors are necessary.

(d) There are pros and cons in each situation to using volunteers as against paid field workers. There are also both advantages and disadvantages in giving monetary incentives to field workers, such as bonus for good field workers. While in some situations that can have a positive impact, in other situations it can be divisive. What is best is for faster or better field workers to learn how to help slower field workers and to view themselves as a "team".

Using of computers or hand tabulations for data analysis is also to be considered. What is important is to have quick and effective communication with intervention team, planners or users of the results.

Hand tabulation is frequently adequate and the only practical way of doing this. Presentation of findings should be done in a way that is understandable to the users.

4.3 Report from Intervention Group - Lessons Learnt

The intervention group presented the lessons learnt from their discussion of the intervention studies.

4.3.1 Definition of community participation

The group felt a need to come up with a definition of community participation, since there seemed to be many different perceptions as to what it means. Community participation in water supply and sanitation programmes was defined as a process whereby the community participates in every phase of development, from identifying needs to planning, management, maintenance, health education and motivation. In other words, it is involvement at all levels from organizational to managerial activities, including decision-making, thereby resulting in the community, particularly the women, feeling a sense of ownership of the water supply and sanitation facilities.

4.3.2 Facilitating factors for women's participation

The group identified what it considered to be important facilitating factors for women's participation in community water supply and sanitation projects. These include water being a critical problem and felt need in the community, the existence of a positive government policy favouring women's participation, opportunity and recognition given by national and international organizations to women's participation, NGOs with roots at the village level, and, in Thailand, Nepal and Sri Lanka, the formal education of women and a positive attitude of society and family towards women's participation.

4.3.3 Constraints to women's participation

The group identified cultural, attitudinal and institutional constraints to women's participation. These included the low status of women, women's low self-esteem and self-confidence, women's lack of awareness of their rights and their own situation, women's dependence on male heads of families as decision-makers, and the burdens of housework and family duties on women. All countries reported domination by males and mothers-in-law which is reflected in the low social and economic status of women (Nepal), sex attitudinal bias (Sri Lanka), and inadequate representation of women in the village councils (Thailand). In Nepal and Sri Lanka, there is an absence of training facilities for women. Indonesia stressed women's inexperience in decision-making outside the family unit, lack of experience by technical personnel in working with women, the traditional concept of a "good" woman, lack of information and outside exposure among women, and lack of leadership experience, even among the PKK leaders. The poor health of women and children and too many children were difficulties faced by Nepal. In Indonesia skepticism towards a women's NGO being able to implement a water supply activity and lack of experience of the NGO women to handle such a programme added to the difficulties of the NGO.

4.3.4 How to overcome obstacles to women's participation?

To overcome these problems, it is necessary first to raise the awareness, confidence and self-esteem of the village women before doing anything else. All countries reported using the home visit approach, group meetings with water users, credit and community development groups, and government departments at all levels. Indonesia used the results of the case-study to hold orientation meetings at sub-district and village levels to increase awareness about water problems, women's role and the like. Thailand approached it from the girl guides' philosophy of a "Future Vision" and the creation of a demand for women's participation through participatory training and songs, seminars on group organization, the role of women in leadership. Nepal used participatory approaches, such as games. They supplemented their women's awareness programme by holding functional literacy classes. Sri Lanka held coordination meetings at the village level. Educational material were used to support seminars and training.

Nepal and Sri Lanka cited bureaucracy of both national and international organizations as a major obstacle to implementation. Lack of coordination among agencies concerned was a difficulty faced by Nepal. Sri Lanka cited too many ministries being involved in the programme, not enough coordination, and some government officials expressing reservations about working with village women. Untimely budget flows were also a problem, often resulting in unnecessary delays in construction.

To overcome these obstacles the group reported that it is necessary to work closely with implementing agencies to achieve women's participation. In all countries regular informal consultations and meetings and governments at all levels, including the village councils, took place after the formal endorsements and meetings. These informal contacts were crucial to the smooth implementation of the activities.

With regard to the siting, design, use and benefits of new water supply facilities, the group stated that water supply facilities cannot always be sited according to women's preferences, since siting also depends upon water availability and how the villages are spread out. However, all countries consulted women as to the design and location of facilities, and Sri Lanka consulted women as to the location of latrines. Although public standposts and other facilities can be made cleaner than before, water handling can still remain unhygienic. However, with more water available, people take bath more frequently. Women may not spend less time in water collection after a water supply project became operational, but they may choose to spend their time saved from shortened collection trips in order to collect more water, as occurred in the Indonesia project. This means more water for bathing, washing, cleaning, vegetable growing, watering of animals, and fish culture. This is regarded by the women, as well as by implementation teams, as a positive outcome of the projects.

5. RECOMMENDATIONS

The workshop adopted the following recommendations to promote women's participation in water supply and sanitation projects:

- (1) For governments that do not already have a formal and explicit policy on women's participation in water supply and sanitation

programmes/projects, it is recommended that they adopt one. However, women's participation in water supply and sanitation cannot occur in isolation; it must occur in the context of an overall women's development programme, as well as the primary health care programme of the country.

(2) Simple data collection that will be used to facilitate community, and especially women's participation, should take place at the preparation stage of the project.

(3) In the project preparation stage, planners should identify social and economic goals as indicators of success leading to long-term and effective use and sustainability.

Examples of social goals are:

- better organized water users groups in the community and women's participation in them
- increased self-confidence and esteem of women
- emergence of women leaders and an improvement in the quality of their lives.

Examples of economic goals are:

- time saved for water collection per journey
- increased water supply leading to increased income.

(4) Time and effort must be allowed to prepare the community (i.e., building trust, learning how to work together, accepting women's active role in decision-making, increasing their self confidence, etc.) to enable women to participate in programmes starting at the planning stage.

(5) Planning should be done with the community within the framework of the government policy and procedures for community development.

(6) Implementing agencies, both governmental and non-governmental, must have roots at the community level in order to ensure community participation. If they do not, they should build or strengthen their structure or forge links with organizations that have the infrastructure and the capacity to do so.

(7) Participatory methods should be utilized to introduce health/hygiene education, preferably starting at entry point, to ensure health benefits.

(8) Funding agencies and planners must accept that participatory projects need flexible procedure for operation if they are to be truly responsive. This includes financial procedures, reporting, monitoring, project plans and activities.

(9) Mobilization of community resources, and appropriate technology are essential elements to achieve self-reliance and sustainability in rural water supply and sanitation programmes. Implementing agencies should not allow time schedules for disbursements or pre-conceived notions about hardware to jeopardise the use of local resources, self-reliance and sustainability.

(10) Goals, targets and indicators should be set to aim for sustainability. Monitoring and evaluation should be participatory to ensure continuous commitment of the community.

(11) It is recommended that WHO take a lead to compile reference material on participatory methods in hygiene and health education.

(12) It is recommended that UNDP/PROWESS be requested to document and disseminate material on data collection and participatory methods in women's participation in water supply and sanitation.

Annex 1

AGENDA

Sunday, 22 May 1988

Arrival of participants and registration

Monday, 23 May 1988

Field trip to Takirin, Intervention Site

Tuesday, 24 May 1988

- 08:00 Inauguration. Welcome Address by Dr (Mrs) Nafsiah Mboi
- 09:45 Plenary - Introduction of participants and Election of Chairman and Rapporteur
- 09:55 Adoption of Agenda
- 10:00 Overview of the experience on women's participation in study areas and issues for discussions by Dr Mayling Simpson Hebert
- 10:30 Country Presentation - Thailand
Discussions
- 16:00 Country Presentation - Sri Lanka
Discussions
- 17:30 Country Presentation - Nepal
Discussions

Wednesday, 25 May 1988

- 08:00 Country Presentation - Indonesia
Discussions
- 10:15 Presentation of issues followed by country self-analysis of tasks 1-4
- 16:00 Country self-analysis of tasks 1-4 (cont'd)
- 17:30 Country self-analysis of tasks 1-4 (cont'd)

Thursday, 26 May 1988

- Formation of Working Groups I and II on case-studies and interventions
- 08:00 Group Work

10:15 Group Work
16:00 Group Work
17:45 Formulation of Recommendations by Each Group

Friday, 27 May 1988

Plenary Session

08:00 Presentation of Group Reports and Recommendations
 and Discussions
10:15 Discussions and Finalizing Recommendations
17:00 Summing of Workshop and Adoption of Recommendations
19:00 Closing Session

Annex 2

GROUP WORK TASKS

Long-range Goal

To achieve women's participation in planning, implementing and maintaining and evaluation of rural water supply and sanitation systems.

Immediate Purpose

To prepare guidelines for achieving women's participation in community water supply and sanitation projects for use by district and sub-district personnel in governmental implementing agencies.

Specific information objectives of the workshop

- (1) To review the process by which women's participation was achieved or not achieved in each case study;
- (2) To review the methods and measurements used to determine the degree of women's participation achieved by comparing baseline information with end results;
- (3) To determine the effectiveness of the interventions for the (a) construction/establishment (b) functioning (c) management and (d) utilization of improved water supply and sanitation facilities through women's participation;
- (4) To determine the impact of increased women's participation on women's family and community well-being, whether their well-being was improved, decreased or remained the same;
- (5) From the findings in 1-4, draw up lessons learned, and recommendations for the design of future interventions for women's participation in community water supply and sanitation in South-East Asia.

Agenda for Group Work

The information required is divided into five categories. The first four categories contain study questions and issues to be discussed. The last category is a summary of the findings, lessons and recommendations derived from the first four. Pace your discussions so that you can finish all five categories in the allotted time.

Task 1: Review the process by which women's participation was achieved or not achieved in each case.

Specific questions and issues:

- (1) What were the facilitating factors for women's participation?
- (2) What were the cultural, attitudinal and institutional constraints to women's participation?
- (3) Is it necessary that a women's organization, either governmental or non-governmental, like PKK or the Sri Lanka Women's Bureau, work with implementing agencies to achieve women's participation?
- (4) Is it realistic and acceptable to government agencies for women's organizations, whether governmental or non-governmental, to be involved in WSS projects?
- (5) What meetings and formal agreements were necessary at the governmental level and community level to implement women's participation in WSS in collaboration with other sectors such as health, social welfare, education, information, and agriculture?
- (6) What were the information and education methods and approaches used at both government and community levels to convince them of the need for women's participation and to facilitate involvement. In other words to create a demand at both levels for WSS projects and women's involvement in them.
- (7) What objections, difficulties or obstacles arose at various levels to women's participation?

* * *

Task 2: Review the methods of measurements used to determine the degree of women's participation achieved by comparing baseline information with end results.

This task was revised to include a review of all of the data gathering methods used, not just data on women's participation. Below is the brief summary of discussions of the case-study work group.

Methods:

- (1) Which were the most effective methods for obtaining baseline information on communities?

Methods used:

Maps, key informant interviews with a range of people, not just male leaders, observation walk, site visits, demographic surveys, indirect questions through interviews, participatory methods, spend the night in a village for observations, long-term participant observations.

The group consensus was that all methods, except perhaps focus group discussions, are useful. In Nepal and Indonesia focus group discussions were found to be ineffective because the leading women or men speak and then all other people agree since it is impolite to disagree. Focus group

discussions are useful for identifying issues which need to be further probed and if the people are already known to the focus group leader. The combination of methods depends upon the context, whether the project is large or small, the type of data that are required, and the time and budget constraints.

Participatory methods were found to be especially useful and reliable, such as the pocket chart.

Indirect methods, such as open-ended questions, pictures, photographs, were found to be particularly useful. Focusing on the same issues using different techniques and different researchers and different respondents were found to be important for cross-checking data.

Quick surveys were found to be useful for gathering data for quick feedback to the implementing agency but to be followed up later by more qualitative in-depth probing to check on reliability.

(2) What were the least effective methods?

One should not use surveys with close-ended and direct questions to obtain socially sensitive information.

(3) How were communities prepared for data collection?

One must approach communities through the established authority structures, to be introduced by letters of introduction, get necessary clearances, win approval of authorities, inform headmen ahead about visit, clarify the purpose of the visit, do not raise false expectations, tell how much time the visit will take. One might have to go through rituals and ceremonies and certainly accept the local hospitality before formal discussions can begin. This takes time, is very important to the villagers and where one should not take short cuts.

(4) How were communities involved in data collection?

Villagers can do mapping, locate water sources, prioritizing their own needs and problems, participating in games, puppet shows, etc., for identifying own problems, self-reporting and evaluation, assisting in testing water quality, using local terms for measurements and adapting definitions to scientific terms, having people tabulate data from pocket charts.

Participatory methods are the first step in community activation. One should not use these methods if the project is only in the exploratory stage as they may raise false expectations.

(5) What problems, difficulties and obstacles arose to data collection?

- Villagers do not want more surveys/studies.
- Language barriers exist.
- Households are scattered over large areas.

- Seasonal changes in rainfall can affect whether or not one can even reach the village.
- Problem of people not being at home such as seasonal migration, time cycle of the village, and seasonal work schedules.
- Poor living conditions for field workers - they sometimes do not want to go there to live.
- The pros and cons of employing highly trained and educated field workers versus inexperienced personnel. The highly trained are more likely to fill in data gathering sheets without interviewing. Inexperienced need to be trained but their naivete is sometimes an advantage.
- Severe time limitations are imposed on researchers by planners.
- Volunteers sometimes feel overworked and want to be paid.

(6) What types of people were the best field workers (their characteristics)?

- Those who are motivated with a fresh inquiring mind.
- Literate people are usually better because of the methods usually used but illiterate people can be used in participatory data collection and observations.
- Interviewers who understand the purpose of the research and the proposed intervention.
- Friendly, intelligent and socially sensitive.
- In some areas, only female field workers to interview women may be more appropriate.

(7) What training was required for field workers? In what they could and could not be trained?

- They can be involved in making research instruments and pre-testing.
- They should be briefed about the project, to understand implementation, project objectives, time-frame, hardware, the role of interviewers, what to tell respondents.
- One cannot train inter interviewers in common sense; it takes long to teach them to probe and evaluate so they can get meaningful answers.
- It is more difficult to train observers and participant observers.
- Field workers are quite variable in the quality of information that they get. Peer sharing can be used to improve the performance of all.

- Pre-testing can be used to screen out ineffective field workers

(8) How much and what type of supervision was required over field workers?

- Instant checking and feedback is necessary. Have field workers make corrections and collect the missing data the next day.
- Monetary incentives or punishment type disincentives are usually divisive among field workers.
- Field workers need to be assisted in coping with problems of village life and illnesses.
- Field workers need supporting supervision which encourages improvement and keeps morale high.

(9) Recommendations - not done - see above pros and cons.

(10) What methods of data collection did field workers do or like best? Which did they dislike?

Dislike: water use measurements. It is difficult because it demands precision, intrusive, tedious and time consuming. However, useful data is yielded.

Monotony of interviews - this can be overcome by giving one day off every 5 days.

Time pressure - should not have tight schedules.

(11) Recommended: Use methods for quick data collection and quick feedback to users.

Measurements of women's participation

Primary measures by priority:

Women's groups involved in decisions making as in planning, implementing or evaluating

Formation or strengthening of women's groups, water and sanitation committees or health committees.

Percentage of men who accept and endorse women's involvement.

A 1-7 scale to measure women's participation from low to high: 1. women don't come to meetings 2. women come but stay outside and listen 3. women sit in meeting but do not talk 4. women talk in meetings 5. women question, challenge, "vote" 6. women lead and ensure action 7. women plan ahead and take long-term responsibility.

Secondary measures:

Percentage of women who have attended meetings, seminars and training courses as compared to men.

Ratio of women/men serving as planners, administrators, workers and caretakers.

Supplementary Questions addressed.

(1) What types of information are necessary and useful for the baseline survey?

See No.4 of lessons learnt.

(2) How should case-study teams and intervention teams interact?

See No.2 and No.3 of lessons learnt.

(3) What potential is there for women's production activities?

Great potential: vegetable gardening, fish raising, mushroom growing, frog raising, making jar covers from flat sheet metal.

(4) How do we identify constraints to women's participation?

By including women in data collection and focusing questions on how women have different access to information, the outside world, their own abilities and their traditional roles. Nepal used drawing homestead maps, other participatory methods such as the pocket chart.

(5) How do we determine villagers highest priorities?

Indirect and participatory methods are best. Involve a variety of people, both men and women, to gather information, not just village leaders.

(6) Can we develop methods that can be transferred to local women's groups and NGO's for data collection.

Yes, especially participatory methods and simple data collection.

* * *

Task 3: Determine the effectiveness of the interventions for the (a) construction/establishment, (b) functioning, (c) management, and (d) utilization of improved water supply and sanitation facilities through women's participation.

Specific questions and issues:

- (1) Were the construction/establishment goals of the project met?
If not, why not?
- (2) Were water supplies and other facilities (latrines, washing areas, etc.) sited with women's preferences in mind?
- (3) Are standposts and other facilities cleaner than before?
- (4) Have hygiene practices of households improved?
- (5) Are old/unacceptable water sources being abandoned for new/ acceptable ones?

(6) Other measures of effectiveness based on specific projects.

* * *

Task 4: Determine the impact of increased women's participation on women's, family and community well-being, whether their well-being was improved, decreased or remained the same.

Specific questions and issues:

- (1) Do women spend more, less or the same time collecting water?
- (2) Has the project resulted in more income-generating activities for women?
- (3) Have women received education or training?
- (4) Have any more women emerged as community leaders as a result of the project?
- (5) Have women's groups been strengthened (more membership) and are better able to identify problems and influence decisions at other levels or in other programmes?
- (6) Do women have raised self-esteem and express pride in their capabilities and accomplishments?
- (7) Do men perceive women as being more capable and accept their opinions and involvement more readily?
- (8) How did the project contribute to community development and/or family welfare?
- (9) Other measures of impact specific to each project.

* * *

Task 5: From the findings in tasks 1 to 4, draw up lessons learned and recommendations for the design of future interventions for women's participation in community water supply and sanitation in South-East Asia.

List the 10 more important recommendations first. In addition to using the findings from tasks 1 to 4, please also consider finding answers to the following broader issues in formulating lessons learned and recommendations.

Broader Issues to be Addressed

- (1) Should case-study and implementing agencies be the same?
- (2) How does one develop a strategy for women's participation in water supply and sanitation projects in countries where no credible national or local women's organizations/groups exist? Do you just build up such an organization, or how does one go about getting women to participate without the backing of such an organization?

- (3) How effective can an action programme be without a simultaneous case-study going on? Future projects will not have case studies. These projects have had case-studies which have served as a stimulus to women's participation and project success. Without this stimulus what will happen?
- (4) How can you build into governmental policy women's participation in water supply and sanitation projects? What advocacy efforts (meetings, seminars, workshops, written agreements) are necessary at all levels from the highest central levels to the sub-district level.
- (5) There is no evidence from the case-studies that women's participation results in better water supply and sanitation facilities management or utilization. Or is there?
- (6) How do we ensure women's participation in water supply and sanitation after the project donors pull out?
- (7) Should community water supply and sanitation caretakers be paid for their maintenance work? Should individual women or men be expected to volunteer large amounts of time to community development projects or should there be some mechanism for paying them?
- (8) Would it be useful to include the primary health care workers, especially the health volunteers at the village level, in any aspect of implementation (data collection, health education, caretakers, etc.)?
- (9) Are WSS programs with women's participation likely to be more effective if there is intersectoral coordination and collaboration (as with Health, Education, Agriculture, Information, Social Welfare, etc.)?
- (10) What should be the role of hygiene education in community water supply and sanitation projects, especially when there is an emphasis on women's participation?
- (11) How else can women's part in WSS be achieved or improved that is outside the findings of these case studies, such as making women's participation part of sanitarian's teaching curriculum or encouraging women to take training in the sanitary sciences?

SUPPLEMENTARY NOTES FOR WORKING GROUPS
(Especially for Case Study P.I.s)

A. BASIC ASSUMPTIONS

1. We believe water/sanitation can be provided "better" if there is community/women's participation.
2. Without data we will not be taken seriously in this belief.

■ It is an uphill battle

- it is simpler to do "project", with special vertical structures.

- it takes time, money and management flexibility (both in timing and what is being done to be participatory).
- it is simpler to measure, say, numbers of pumps installed than, say, amount of water used, or attitudes.

3. We are on the leading edge - we are finding a new way of looking at development, and then of measuring development.

B. WHY DATA?

- it is means of communication (makes projects more responsive, facilitates a dynamic learning process at all levels),
- if data collection is participatory, it can be a means of social activation.

2. We need data to show that participatory projects have "success" in terms of slightly extended objectives (long-run):

- installations maintained
- lower cost in long run
- better health impact.

3. We need to design indicators to document "fuzzy" aspects, which often are impressionistic (qualitative/quantitative) e.g., women's self perception, levels of participation.

4. We need to help "the powers" to become more flexible.

C. ISSUES TO BE ANALYSED IN GROUPS

1. Themes:

- not necessarily leading to guidelines but pros and cons,
- ping-pong between: research
 - software intervention
 - hardware intervention
- what difficulties were encountered, how were they overcome?
- how can general and expensive methods be adapted and made inexpensive?

QUESTIONS TO BE ANSWERED

1. What types of information are necessary and useful for the baseline survey?

- map of village and water sources
- demography
- structure functions and activities of community organizations
- number of installations and maintenance

- use of installations
 - * number of water trips/time for trips
 - * time saved/extra time needed
 - * is water collection a problem
 - health - water quality, health activities, attitudes, knowledge, water storage (faecal coliform)
 - women's perception of selves/mens perceptions of women
 - mapping of women's cultural landscape identifying disadvantaged women and defining what women, what percentages.
2. How case-studies inform intervention groups and communities themselves:

How should case-study teams and intervention teams interact?
 3. What potential is there for women's income generating activities?
 4. How do we identify constraints to women's participation?
 5. How do we determine villager's highest priorities?
 6. Can we develop methods that could be transferred to PKK leaders and similar NGO's in order for them to do case studies?
 7. Case studies cannot be replicated but certain participatory methods and data gathering techniques can be transferred. Which ones?
 8. There are fundamental changes in ways of doing business, measuring success of project and evaluation of personnel. What are they? List.
 9. What types of indirect data gathering techniques were developed and successful?
 10. What other useful data gathering methods were uniquely developed for the project?

Annex 3

LIST OF PARTICIPANTS

Indonesia

Dr (Mrs) Sonya Roesma
Director, Water Supply
Director-General of Communicable Diseases
Control and Environmental Health
Ministry of Health
Jakarta

Dr Agus Berek
Kanwil Kesehatan Prop NTT
Kupang, NTT

Dr (Mrs) Nafsiah Mboi
Chief, PKK, Rumah Jabatan
Kupang, NTT

Mr Soi Therik
Bappeda Prop, Dati I NTT
Kupang, NTT

Ir Ella Likadja
Dosen Fakultas Pertanian (UNDANA)
Universitas Nusa Cendana, Penfui
Kupang, NTT

Nepal

Ms Indira Shrestha
Integrated Development Systems (IDS)
P.O. Box 2254, Baneshwar,
Kathmandu

Ms. Indra Gurung
Women's Development Officer
Ministry of Panchayat and Local Development
Kathmandu

Sri Lanka

Ms Muthulatha Perera
Assistant Director
Women's Bureau
No.5, Milepost Avenue
Colombo

Thailand

Khunying Kanok Samsen Vil
The Girl Guides Association of Thailand
5/1-2, Phyathai Road
Bangkok

Dr (Ms) Nongluk Tunyavanich
Faculty of Social Sciences & Humanities
Mahidol University
Salaya, Nakhon Pathom

OBSERVERS/INVITEES

Ms Malika Ratne
UNICEF, Jakarta

Ms Katie McDonald
USAID, Jakarta

Mr Paulus Kedaru
Chief, Water and Sanitation
NTT Province

SECRETARIAT

Ms Siri Melchior
Project Manager INT/83/003-PROWESS
United Nations Development Programme
One, United Nations Plaza
New York, N.Y. 10017, U.S.A.

Dr (Mrs) Deepa Narayan-Parker
7444 E22nd No. 43
Tucson, Arizona 85710, U.S.A.

Dr (Ms) Mayling Simpson-Hebert
P.O. Box 774472
Steamboat Springs, Colorado 80477, U.S.A.

Dr Saroj Jha
Ag. Regional Adviser on Health Education
WHO/SEARO, New Delhi

Mr M.L. Gupta
Chief, Promotion of Environmental Health
WHO/SEARO, New Delhi

RESOURCE PERSONS

Ms Karen Smith
PKK, Rumah Jabatan
Kupang, NTT
Indonesia

Mr E. Pancaroglu
WHO Sanitary Engineer
P.O.Box 302
Jakarta, Indonesia

Annex 4

REPORTS FROM CASE STUDY AND INTERVENTION TEAMS

1. Indonesia Case Study Report

The case-study was presented by Dr Deepa Narayan Parker, the Principal Investigator. She discussed the methods used for data collection, the training methods for field workers, and the keys to the success of the project, which were interrelated. She stated that it is best to go into this kind of research without any assumptions. One should keep eyes and ears open and try to learn everything from the villager's point of view. She involved the interviewers in developing the research instruments, such as open-ended questionnaires, and participatory methods that used drawings, photographs, voting using a pocket chart. This resulted in the interviewers having a strong commitment to the proper conduct of the research. There was a good utilization of negative results from the case study. Never did the intervention team feel threatened or unhappy about negative findings, such as weaknesses in the PKK at the district and village levels, even though they had thought these organizations were strong. They accepted the results and utilized them to begin a strengthening of the PKK.

As to the methods used to collect information, she made the following points:

(1) Direct questioning was never used to evaluate impact of the project on the people. All questioning was open-ended and indirect. This is because with direct questions people will want to give you the answer they think you expect, in order to be polite. People, thus, are aware of "correct" answers to questions on impact. Also, observations were done to measure impact, rather than indirect questioning.

(2) Observations were especially used to determine hygiene practices and water use practices. For example, to determine water collection practices, such as the time involved for each journey and the number of journeys per day, observations were made on 612 households and 1516 water journeys. Site visits were made to determine water sources. The same water source can have more than one name, and it had to be figured out that two different people might be talking about the same source, rather than two different sources. Villagers assisted in mapping dusun water points and this proved to be a successful participatory method. Water quality tests were performed for faecal coliform only, at the source and at home. These tests were found to be too expensive to be used routinely.

(3) To determine the strength and functioning of the PKK at various levels, key informant interviews were used. Group meetings to obtain information were not found to be successful, as only the leaders talked. The case-study also examined the written records of the PKK to determine functioning. Field workers and Women, Water and Sanitation Action - Study Programme (WAS) action team members kept diaries of their field work which were additionally used as data.

(4) Semi-projective techniques, indirect methods, were used to learn about health benefits, such as health games and picture card games (modified UNICEF pictures). These were carried out on a 10% sample of men and women, 119 respondents in all. Three participatory games, using pictures, tokens and voting with a pocket chart, were developed to obtain

information on socially sensitive issues, such as to determine degree of women's participation in the activities, men's attitudes toward women, women's attitudes toward women, who made decisions in the village, and women's self-esteem. These proved to be extremely successful methods.

(5) A children's questionnaire was administered in school grades 3 and 6 to 169 children. At first the teachers would go around and tell the children the correct answers to put. The case-study team eventually had to ask the teachers to leave the room so the children could answer in their own way. The children enjoyed this exercise very much, and the case-study team learned a great deal about children's beliefs and practices. Children are more candid in their answers and in some ways are better informants than adults.

(6) Criteria used to measure success of the project were not only the number of new water systems built or improved or the number of people trained but also the degree to which community involvement, especially that of women, had been generated in the building and management of water systems. Also considered was how many water-user groups were functioning effectively, gathering local materials, collecting cash contributions and solving their own problems.

The project has had spread effects, such as the formation of new water user groups, village leaders from other villages becoming interested in the activities and other villages now forming their own water user groups, the PKK members now speaking up in meeting of all sorts, and changes in technical and planning departments of government ministries.

She stated that the key to success in this project was the strong central leadership of the PKK, the PKK being able to pull things together and then being able to let go and say to the village "this is your activity", having a strong management person for financial matters and using the "Maria" book (a book where field staff could write a note to the project director and get an answer within 24 hours) for improved communication among field staff and the director, the case-study providing quick, relevant information from the research, and the utilization of both positive and negative findings by the intervention team. She also stressed that it is important to have case-study researchers who are non-judgmental and humble.

2. Indonesia Intervention Report

Dr Nafsiah Mboi, Chairperson/PKK Prop. NTT, presented an overview of the Action-Study Programme of Women, Water and Sanitation, also called WAS, operating in four villages under the auspices of the PKK. The WAS programme operated as a partnership among government agencies, the local universities and the PKK.

WAS is carried out almost entirely by volunteers. There was a great deal of cooperation from full-time paid field staff from the Health and Community Development Departments, some of whom had undergone special training for 6 months, including training in field and participatory approaches to village water supply and sanitation planning.

The following construction activities have been undertaken and completed directly through WAS in cooperation with village water user groups in the four villages: 6 bore holes, 9 spring captures, 5 shallow wells (lined, deepened, 2 fitted with hand pumps), 7 water reservoirs and 15 standposts. Individual and new water user groups in neighbouring villages, not part of the WAS activities, have also lined wells, deepened shallow wells, cleaned springs and built spring captures. These new sources were being utilized by 75% of the villagers, who would walk past old sources, that may be closer, in order to use the new ones. Water consumption increased from 7.8 to 9 litres per day in one year. Women spent the same time after the completion of activities as before collecting water because they were choosing to use their extra time to collect more water. The water brought to homes was being used in ways that promoted better health and increased income. People took more baths and began growing vegetables. As many vegetable plots were located near new water sources and watered directly from them, water used for these is not reflected in the 9 litres per day. Women remarked that they felt their families were cleaner now than before, and the vegetable growing had resulted in increased vegetable consumption in families and increased income for women. There appeared to be no change in water handling practices after collection from the source and water thus continued to become contaminated once inside the home. The PKK has not yet launched a health education campaign to address specific behaviours that contaminate water.

The success of the project is largely due to the formation of a WAS team, consisting of members from PKK, Health and Community Development departments, and the village water user groups elected from the community. Another factor in success was the timing and use of information between the case-study and intervention teams. Rapid feedback of data collection and continuous interaction between case-study and intervention teams were emphasized as important. To promote a spirit of self-reliance, the term "project" was deliberately avoided with its inherent characteristics of signifying outside aid and that the activity has a time limit. An "activity" on the other hand, the term adopted by the project, emphasizes a need for villagers to plan and carry out actions themselves with as little outside aid as possible and that there is no time limit; it goes on into the future just as long as the villagers see a need for it. The project received good support from the government, and women participated and were responsible for the project in all its respects.

3. Sri Lanka Case Study Report

The Sri Lanka case-study team was not represented at the workshop.

4. Sri Lanka Intervention Report

Mrs Muttalatha Perera, Assistant Director of the Women's Bureau of Sri Lanka presented the main findings from the interventions.

After a brief background of the health status of the Sri Lanka population, details of the intervention related to women's participation in water supply and sanitation as a sub-project of the larger UNICEF-assisted Anuradhapura Integrated Basic Services Project was presented.

The main activity of the intervention was to provide water and sanitation facilities through the training of health volunteers and health facilitators.

The project operated in 95 villages and trained 400 health volunteers, mostly women, and 50 women facilitators, a paid post. They were trained in health, water and sanitation activities with assistance from the Department of Health. They work with the Public Health Workers of the area and assist in the implementation and monitoring of project activities. Each health volunteer is responsible for 20 families in her area. They advise families on good health habits and supervise the construction of latrines. As a result, 1 222 latrines have been constructed in the project area. The project also includes assisting women in income-generating activities and training school teachers in project goals. Training programmes included not merely training in water supply and sanitation but also other aspects of health, such as mother and child care, immunizations and nutrition.

The project has also been successful in establishing 15 Gramodaya Health Committees in the project area which have a majority of women members. They meet monthly to review project activities of the previous month in their areas and approve the action plan for the following month.

The Women's Bureau has coordinated successfully with the National Water Supply and Drainage Board to construct 167 of the 280 tube wells needed in the project area and in the training of tube-well caretakers, who are mostly women.

Due to multiple government agencies that are involved in water and sanitation (Health, Public Works, Water Development Board), the Women's Bureau sometimes had difficulty in coordinating with so many at once, but this difficulty was eventually overcome through the formation of a Steering Committee which met every three months.

The project had some important accomplishments. It created an awareness among the people of their water supply and sanitation problems. More people began to use latrines. There were more latrines constructed under the supervision of volunteers. All of this occurred despite the political turbulence which began in 1987, a year after project start-up.

5. Nepal Case Study Report

Mrs Indira Shrestha of IDS presented the survey methods and findings of the first phase of the case-study research. The second did not take place.

Research was undertaken by four IDS field staff, two males and two females for a period of ten days in each site for the baseline survey and five days for the hygiene and water use surveys. Questionnaires were used to collect the quantitative data while participant observation throughout the survey period (10 days) proved to be an effective means of gathering the qualitative information. In Gajuri (pop. 5463) a 16.7% sample was drawn and in Fikkal (pop. 6279) a 13.5% sample was drawn. This resulted in a total of 1763 individuals and 298 households being surveyed. Women in the homes were interviewed but men were often also present, sometimes trying to provide the answers. Key informant interviews were used with village heads, panchayat village workers, women's motivators, health post workers and teachers. Relevant documents were reviewed and informal discussions in teashops and at standpipes also done. Informal discussions with 15 to 20 women were also held outside in courtyards on two occasions.

Important findings of the baseline survey are:

(1) Women do not play an important role in planning, implementing or maintaining facilities in development projects nor do they expect to play more than a marginal role. If at all involved, they often do the heaviest work, such as carrying sand and stones. It was found that women often have a negative attitude about their capabilities and said that development work is men's work and moreover they are too busy to get involved with it.

(2) Government technicians dealing with water supply and sanitation projects have minimum consultation with target groups or communities. They have no training in community participation concepts and often equate community participation with free labour. More so they do not have a clear concept how to involve women in such projects and the social barriers that exist between technicians (usually male) and village women prohibit much interaction.

(3) Sanitary components of projects are difficult to implement. One reason for this is that villagers are reluctant to use pit latrines because they value the human excreta as fertilizer, given the general lack of organic matter in the soil. In general the sanitation situation in villages is poor.

(4) Maintenance of existing water supply facilities in villages is not satisfactory. Village maintenance and sanitation committees exist only on paper in most visited areas. Often there had been no maintenance because the appointed maintenance worker had either left the job or did not get paid. Villagers counted on government maintenance and sanitation technicians to perform necessary repairs.

Many constraints to women's participation in Nepal were identified. Some village settlements are quite small (5-6 houses) and women refuse to interact with other villagers. Women were found not to be open to the opinions of others. Contributing to this problem are barriers imposed by the caste system, low female literacy, and women being unaccustomed to making decisions but instead defer all decision making to the men. Also, women are too busy to take on extra duties; they already work 10 to 12 hours per day. General community constraints were identified also, such as people being too poor to contribute financially to project, even though hypothetically they are willing to do so, mistrust of local political leaders, and long delays between project identification and approval. Budgets for projects often come late, thus people are always skeptical about new projects.

6. Nepal Intervention Report

Ms. Indira Gurung, a Women's Development Officer, presented the intervention side of the project. She began with a description of how the Women's Development Section (WDS) operates in the rural areas and how Women Development Officers go as facilitators. After an area has been selected for intervention (development of the women), the officers map the local resources, complete a social survey form, spend time building rapport with the women, assist in the formation of community development groups, identify with local women their needs and community needs, plan a project together with the women, conduct a feasibility study, place the project

into the WDS yearly plan, and do implementation and follow-up evaluations. It is in this way that the community water supply projects in three sites were identified and planned with the women in this UNDP/PROWESS project promoted women's participation.

Three pilot sites have been identified for the women's participation project, Gajuri, Fikkal and Melamchi. Actual construction has begun only in Melamchi. Delays in construction at all sites are due to problems in coordinating with other government agencies and difficulties in budgetary procedures and the budget did not flow as expected or required. There are only 5 months of the year for construction work, and when these months are missed, they must wait another year for construction. Also, the chief of the Women's Section had temporarily gone on leave.

The UNDP/PROWESS project had sent several consultants to Nepal in 1986-87 to give a series of training of trainers workshops on the "software" components of women's participation. Participatory methods of motivating village women to take action in their communities were taught to field staff and rural women. Visual materials for motivating women to undertake water supply and sanitation activities were designed and produced with the help of an artist. This was regarded as a great success and Ms Gurung would like to see all Women Development Officers trained in these methods.

7. Thailand Case Study Report

Dr Nongluk of Mahidol University presented the Evaluation of the Promotion and Support for Women's Participation in a Village-Based Water and Sanitation project, giving information on research methods and strategies, and implementation processes.

Baseline information on socio-cultural attributes, community awareness and involvement, sources of water supplies and their condition, utilization, quality and quantity, sanitation and constraints to women's participation were collected through the use of questionnaires and participant-observation. During the project ongoing activities were continuously recorded; participant observation was used to determine physical and behavioural changes in the communities. For the post-intervention data, both interviews and participant observation were used to collect data on water supply and sanitation. In addition, information on the training programme and the impact of training, community participation, changes in family income and opinions on community development, and participation in water and sanitation development were collected. 100% household surveys were conducted; only households that had no one at home were left out. Different sets of questionnaires were developed for the different people surveyed: village women, village men, village key informants, concerned government officials, and Girl Guides Association of Thailand (GGAT) project staff.

Ten male interviewers were recruited from the local areas and spoke the local dialects. They were trained in interview techniques. For participant observation, four male social science master candidates were recruited. Female social science master candidates were few in number at Mahidol and were unwilling to endure the hardships of village life. The principal investigator was constrained in looking outside her own

university for more female research assistants. Three rounds of participant observation were done, the first round for six weeks and the second and third rounds for two weeks each.

Dr Nongluk presented some highlights of the findings. One village achieved 100% latrine coverage and boiling of water but the reasons for this could not be determined. It was the smallest, most isolated and most cohesive of the six villages. Although water quantity had improved, water shortages continued due to a sharing of facilities with nearby communities and increased use of water for flushing latrines. There was not much change in quality of drinking water because people did not change their water handling practices. Health and hygiene education was not an emphasis in this project. The number of latrines constructed had increased, and there was evidence that most people were using the newly constructed latrines. Recall among villagers of the topics covered in the training programmes was very high. Finally, there was a new awareness of the health benefits of improved water supply and sanitation.

There was progress also in women's participation. Men's attitudes towards women's participation became more positive and more women attended meetings than before. Nearly all of the people (99%) in each community were aware of the activities being carried out jointly in the girl guides and the community.

8. Thailand Intervention Report

Khunying Kanok presented the impact of GGAT's intervention programme on the six villages concerned. She reported that the project has contributed to the success of 3 villages which won the contest in their respective districts as follows: (1) Barn Samrong was named the village with best basic health care of Sankha District. This village was in bad shape when the programme started, (2) Barn Bok was named the most outstanding village of the District of Somrong-tarb, (3) Barn Nonkhorthong was chosen the best village of the district of Karbchderng.

Though the other three did not win any award, they have improved a lot. These indicate that the programmes planned and executed are the right solution to the betterment of these villages.

The project has led to the self-development of women. They have more confidence in themselves. Their participation in the community is clearer than before. Men became convinced of the importance of women's training.

The prevalence of diarrhoea had decreased. This good news came from the village health volunteers who sell the medicine to villagers. He reported that no diarrhoea tablets were sold after the programme has come to the village.

Some constraints to women's participation were presented. The most important being the traditions and customs which placed women in secondary roles with low decision making powers in the community. Khunying Kanok stressed that changing many of these traditions will take time. It is certain that through such training programme organized by GGAT, a change will take place.

Annex 5

REPORTS PRODUCED UNDER WHO/SEARO CASE STUDIES PROJECT

- (1) Report on Inter-country Workshop on Methodology for Case Studies of Women's Participation in Community Water Supply and Sanitation, Bangkok, Thailand, 26-31 May 1985
- (2) Report on Mid-Course Case Studies on Review of Women's Participation in Community Water Supply and Sanitation, Kathmandu, Nepal, 12-19 September 1986
- (3) Promotion and Support for Women's Participation in the International Drinking Water Supply and Sanitation Decade. Case Studies of Nepal by Integrated Development Systems, P.O. Box 2254, Baneshwar, Kathmandu, Nepal, July 1987
- (4) Case Study on Women's Participation in Water Supply and Sanitation. Final Report by IRED - Development Innovations and Networks, 64, Horton Place, Colombo 7, Sri Lanka, August 1987
- (5) Case Study Report: Women, Water and Sanitation. An Action-Study Programme by PKK Prop. NTT, Indonesia by Deepa Narayan-Parker, September 1986
- (6) Case Study Report on Women's Involvement in Communal Water Systems. The PKK Experience, by Deepa Narayan Parker for PKK, Kupang, NTT, Indonesia, December 1987
- (7) Baseline Data Report on Women, Water and Sanitation in the Rural Northeast of Thailand by Nongluk Tunyavanich, Prasit Leerapan, Thawatchai Boonchote and Subarn Panvisavas, Faculty of Social Sciences and Humanities, Mahidol University, November 1986
- (8) Research Report on the Evaluation of the Promotion and Support for Women's Participation in a Village Based Water and Sanitation Project, by Nongluk Tunyavanich, Prasit Leerapan, Thawatchai Boonchote and Subarn Panvisavas, Faculty of Social Sciences and Humanities, Mahidol University, Thailand, 1987