

## WOMEN IN THE OPERATION AND MAINTENANCE OF WATER SUPPLY SYSTEMS IN GHANA

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### INTRODUCTION

The need for community management of water supply systems is increasingly recognized as a necessary ingredient for the long-term sustainability of such systems. It is also well recognized that women play a central role in the collection, utilization, and management of domestic water supplies in developing countries. Women have the most interest in keeping close, convenient and safe water sources available as they are the ones who must revert back to traditional sources, often distant and unsafe, when these fall into disrepair. Women, by virtue of their daily contact with water sources have immediate knowledge of their operational status and are the most appropriate community members to take charge of the long-term operation and maintenance of water supply systems.

Increasingly, national government, external support agencies, and non-governmental organizations have attempted to implement community based management approaches. However, in many cases, women have not been effectively integrated into such approaches. Projects which have attempted to include women into operation and maintenance systems have often caused women to experience negative effects such as increased work burdens, financial stress, social disapproval, risk of physical and sexual safety, and increased stress on their time. It cannot be assumed that women will continue to bear the burden of keeping these community based operation and maintenance systems afloat. When women's time, energy and resources become too stretched, women have no choice but to allow modern water systems to fall into disrepair and revert back to traditional water sources (Hoffman 1992).

The Accra (1993) Conference on the Sustainable Operation and Maintenance of Rural and Urban Water Supplies in Ghana recognized the need for the better integration of women into the community based approach to water supply system management. The authors have worked on several water supply and sanitation projects being implemented in northern Ghana. The approaches taken to integrate women into these water supply projects, and kinds of problems experienced by women as a result of their participation in these projects will be highlighted in this paper. The collective experiences of these projects brings to light a number of main areas of concern which will need to be addressed if women's participation in operation and maintenance systems is to be sustained over the long term.

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## **WOMEN IN OPERATION AND MAINTENANCE IN GHANA**

The authors have worked as gender specialists and community mobilization specialists on a number of water supply projects, both rural and urban, in northern Ghana. These projects include the three CIDA funded GWSC Assistance Project (GAP), the Integrated Village Water Project (IVWP) of the Northern Region Rural Integrated Program (NORRIP II), and the Water Utilization Project (WUP), as well as the UNDP Pilot Project. All of these projects have attempted to integrate women into operation and maintenance. The positive and negative experiences of these projects shall be highlighted.

### **GWSC Assistance Project (GAP)**

The GWSC Assistance Project has as its main objective to ensure the sustained operation and maintenance of the existing water supply infrastructure in towns and cities on the three regions of northern Ghana. Mechanised (diesel and electric powered pumps from boreholes or surface water reservoirs and streams) and non-mechanized (boreholes and shallow wells with VLOM pumps) systems are rehabilitated and upgraded, with some 1,845,000 people expected to directly benefit from this project. Community management of all water systems has been instituted through Water and Sanitation Development Boards (WSDB) which are linked directly to the district government structure and which control the total community water supply, both mechanized and non-mechanized.

In GAP, the integration of women has become an increasingly important aspect of the community management process. GAP has experimented with, and instituted a number of WID/GAD initiatives. For example:

1. The implementing agency has instituted an internal monitoring system for gender. The project has collected disaggregated baseline data to enable the project to monitor gender involvement and to use monitoring results as a planning tool for further improvements in women's involvement.
  2. A policy was set forth that 50% of the Community Liaison Workers should be women.
  3. All GWSC, Implementing Agency and Community Liaison Workers receive gender analysis training.
  4. Gender sensitive male Community Liaison Workers have had a positive influence on the messages being disseminated at the village level. They play a key role in changing traditional attitudes amongst the male village population and creating a more favourable environment for greater women's participation in leadership roles.
  5. The structure of the Water and Sanitation Development Boards (WSDBs) was made gender sensitive in that the categories of board membership were made favourable to women. For example, the Boards included such organizations as the PITO Brewers Association and the Food Sellers Associations which are basically all women's groups, as well as a health care professional and teacher who are also predominantly women. Approximately 1/3 to 1/2 of the Board members became women.
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6. Three WSDBs out of a total of 12 formed are chaired by women and women are present on the executive committees of all WSDBs.
7. The project has a part-time Gender Equity Advisor who conducts the monitoring of gender and women's involvement and advises the project on future needs.

In addition, GAP has recently made the distinction between a WID (women in development) focus and a GAD (gender and development) focus. The project has recognized that in order for women to be fully empowered to participate in community and national development, efforts must be made to focus on both women and men, and the relationship between them, so that traditional attitudes, the division of labour and other gender based constraints which affect women's participation can be changed.

In GAP, women's participation is not defined simply by the number of women involved in project activities. Within the community management approach, the project has focused on enabling women to participate at an effective, decision making level.

However, it should also be noted that there are still a number of constraints to women's full participation. These include:

1. Women still experience resistance from men who are uncomfortable with women in leadership roles. Outspoken women are seen to be a threat and some men try to suppress this attitude.
2. Many women in the communities are illiterate and these women find that their participation is constrained not only by their illiteracy, but also because of the little value attached to their opinions by other villagers, particularly men.
3. Women, especially in rural areas, do not possess high levels of self confidence and do not believe that they are capable of taking on leadership positions. Literate women tend to have much more self confidence and will take on such positions.
4. The project has succeeded in achieving greater women's participation, but has not sought to reduce women's other reproductive, productive and community responsibilities. Thus women's time and energy have been taxed by their participation in project activities. Men have not assisted women by taking on non-traditional work such as childcare or housework.
5. Women are still very much controlled by men. In many cases, women have to obtain permission from their husbands to participate in project activities. As well, unless women have established their own financial and material status, women are still defined by their husband's position in the community. In some cases, a husband's position influences the selection of a woman for a particular position.

### **Integrated Village Water Project/NORRIP**

The Integrated Village Water Project (IVWP) encompasses the second phase of the Northern Region Rural Integrated Program whose first phase was established to assist the Government of Ghana with the assessment of the resource potential of the region and the formulation of sectoral plans for future development. IVWP is to provide 350 boreholes and hand dug wells fitted with VLOM handpumps with the support of a community development programme to ensure continued operation and maintenance of these systems.

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Village Water and Health Committees (VWHC) have been established in the villages and are responsible for the management of the community water supply systems and sanitation facilities. Village Extension Teams (VETs) cover six villages each to mobilise communities, establish VWHCs and train these committees to take over management of the water supply and sanitation systems. The VETs liaise with District Management Teams (DMT) which in turn liaise with the NORRIP executing agencies.

Specific actions have been undertaken in IVWP to integrate women into its activities. These include:

1. A WID/GAD coordinator was appointed to the project.
2. A WID/GAD sector oriented strategy and policy paper was developed for all project activities.
3. Gender analysis workshops have been held at the village, district and regional levels.
4. As of March 1992, there were 7 women in the 27 member DMTs.
5. The VETs are made up of one woman and one man. The female extension worker can reach out to village women to get them involved in community discussions and enable them to receive information first hand.
6. A goal of 50% female membership was set for the VWHCs.
7. Two members of the VWHC, one female and one male, are to be trained as handpump mechanics by the VLOM Support Unit.
8. Female handpump mechanics have been a good role model for other women, and for villagers who may be sceptical about women's ability to participate in project activities.

A number of constraints to women's full and effective participation in IVWP activities still, however, exist. These include:

1. Although it was envisaged that women would make up 50% of the VWHC membership, only 33% has so far been achieved, and within these committees, women have not taken on leadership positions such as chair or secretary.
  2. Even though women are present in committee meetings, their participation is low. The leader of the women's group (magazia) is usually the spokeswoman. A few other women who are economically better off or who have travelled out to urban centres may participate actively in the discussion, but the rest remain silent.
  3. Men are still very much resistant to sharing power with women. Women have been relegated to labour and routine tasks such as pump site cleaning while men take on the leadership roles.
  4. Women's multiple roles and heavy work schedule constrain women in participating in training programmes. If such programmes run over 2 to 3 days, women cannot afford the time to attend. Thus, even though the project has actively sought to involve women in training programmes, it has not taken women's multiple roles into account in terms of the mechanism and timing of delivery.
  5. Women have taken on the full responsibility for making contributions to the Hand Pump Fund. Men often view water tariffs as the responsibility of women because of their prominent role in domestic water supply. The current water tariff collection mechanism in fact assists men in shirking their responsibility. Theoretically, the household is supposed to actively go out to make their contribution. However, in most cases, this is not done and so on-the-spot contributions are taken at the pump site, where usually only women are found.
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6. Some women have found it difficult to make these contributions. The project has not incorporated an income generating component which may assist women in making money available for the Fund.
7. Women being trained as handpump mechanics are enjoying their new role in the communities and the new status that it accords them. However, many feel that they should receive remuneration for their services. They have not brought up their concerns in community/committee meetings.
8. Health education messages were targeted only at women. If real change is to occur, with men taking on responsibility for household hygiene men also must be targeted.

### **The Water Utilization Project (WUP)**

By the scheduled end of WUP, the project will have gone through three phases. The first phase concentrated on increasing the coverage levels of water supply and sanitation systems with very little community involvement, except as handpump caretakers within a centrally organized operation and maintenance system (only men were recruited as caretakers), and as recipients of a hygiene education programme. Village Education Workers (VEWs) were responsible for the delivery of the programme. The second phase changed its primary emphasis onto the effective delivery of health

messages. Community Water Organizers (CWOs) took over the VEW's and handpump caretaker's responsibilities. Half of the CWO's were women. The third phase will replace existing handpumps with VLOM handpumps and will extend coverage in the Upper regions.

A number of positive WID initiatives have been undertaken in WUP. These include:

1. By 1991, half of the CWO's were women.
2. To encourage women's participation within the district and regional management teams, WUP III will offer specialized training to women in order to develop their leadership and managerial skills (Thibault and Tsikata 1992).
3. Each village water committee will have a minimum of 2 female members.
4. As far as possible, all individuals trained as hand pump mechanics will be women.
5. Female CWOs are being trained in the technical aspects of VLOM.
6. WUP developed effective educational strategies for delivering health messages. The use of radio programmes was particularly effective, especially for women who are constrained from participating in traditionally structured workshops.

### **The UNDP Pilot Project**

In the UNDP Pilot Project, there has been marked success in achieving the integration of women in project activities.

1. Out of the seven member Water and Sanitation Committee, at least three are women. In some cases, all seven are women.
  2. Women hold leadership positions in these committees, ranging from chairwoman to secretary to treasurer.
  3. Women are regarded as being more careful and honest than men, and thus are entrusted with the treasurer position.
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4. There is a female handpump mechanic in every community alongside a male counterpart.

In fact, women are responsible for organizing and leading almost all of the communal activities surrounding the water system; including tariff collection and saving, pump site development, and the decisions affecting the operation and maintenance of the systems.

#### **TOWARDS NEW OPERATION AND MAINTENANCE SYSTEMS**

From the collective experiences of these four projects a number of similarities, not only in the approaches taken in integrating women into O&M, but also in the kinds of problems that women have experienced as a result of their participation in operation and maintenance emerge. These experiences are also very similar to the experiences of women in operation and maintenance in other developing countries. An analysis of these commonalities provides a useful planning tool for the formulation of operation and maintenance systems which do not place further burdens on women's time, energy and financial resources. Unless women can derive major benefits from their participation in water projects; not just in health, but also in economic, social, and political spheres, operation and maintenance systems which depend on women's labour will ultimately fail.

There is a need for continued exposure to the needs and opinions of women within the community, for further research and experimentation with different approaches and the initiation of a collaborative process between the various agencies working in community management of water supply systems in Ghana in order for more appropriate O&M systems to be developed. The authors believe there are four main areas of concern which need to be addressed within this process of experimentation and collaboration.

First, projects have shown very little understanding of the need to focus not only on women in WID initiatives but rather on women and men, and the relationship between them. Projects have too often identified the problem as being women, rather than as unequal power relations between women and men which allow women to become overburdened with work without the political, economic and legal power to change their position. Projects have perceived these gender roles to be immutable, and therefore unchangeable. However, true success of community based operation and maintenance systems will only be realized if men take on more household and childcare responsibilities so that women will have more time to pursue work in the community development and productive spheres.

A second major issue identified is that within the community management approach, projects have often allowed women to take on the brunt of the burden for carrying out the routine work involved in keeping O&M systems working. Women have taken on many responsibilities including preventative maintenance measures, health and hygiene education training, committee or board meetings, tariff payment and collection and pump site and latrine cleanliness. These responsibilities have placed additional stress on women's time and energy as well as their financial resources. Although women's contributions to the project is regarded as very important, overall women's status in the community has not been substantially raised. Projects have sought to satisfy the practical needs of both women and men, but have not addressed the need to integrate strategic needs of women such as consciousness raising, increasing self-confidence, and training and strengthening of women's organizations. Women need to be empowered so that they can improve their position in society and transform power relations so that all constraints to their participation in the development process can be eradicated.

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Thirdly, there is a need for an enabling environment within which community management can be fostered. An enabling environment has been defined as one that includes the formulation of a policy framework, adequate information and assistance in organization at the community level, training and human resource development focused at community organizations and appropriate financial arrangements for capital and recurrent costs, and access to external loans and grants (Livingstone 1993).

An enabling environment specifically for gender should encompass:

1. The formulation of a national gender policy for women in water supply and sanitation projects, created in collaboration with government agencies, external support agencies and community organizations. Importantly, because gender undercuts all development sectors, persons involved in this collaboration should not be limited to the water sector, but include specialists from any agency or organization working on gender issues in Ghana.
  2. The provision of human resource development for women and women's groups at the community level. This would encompass training in leadership, managerial, organizational, technical and financial skills. Such programmes should not be limited to enhancing women's participation just in project activities, but should extend to any activity women are involved with and need further development of skills in order to achieve greater well-being. Within this issue is the need to develop better delivery mechanisms for training programmes. It has been shown that women cannot afford the time to attend traditional day and week long workshops. Radio programmes show great promise in terms of allowing women to stay home as well as in reaching as many women as possible.
  3. Traditional attitudes within the communities was identified as perhaps the primary constraint to women's more effective participation in the community management of water supply and sanitation systems. Both women and men believe that women's work and abilities are inferior to those of men. This attitude can be changed so that girls and women gain more self confidence, and boys and men recognize the value of women and women's work. Although much progress has been made by simply carrying out project activities, deliberate consciousness raising programmes need to be integrated into community mobilization activities. It not only takes a great deal of time to change deeply engrained attitudes, but also change needs to occur within a non-threatening environment.
  4. There needs to be greater representation of women in all agencies involved with community development work, both in government sector agencies and external support agencies. There are very few women in decision making positions in most external support agencies. Many difficulties arise from this underrepresentation. Programmes and projects are often initially designed without adequate gender sensitivity. Subsequent gender initiatives tend to be added on and marginal to the main thrust of the programme. In many cases, disaggregated baseline data were not used in the design of the project. This makes subsequent monitoring of gender initiatives difficult. In some cases, a WID/gender specialist is not appointed to the project or is only appointed on a periodic basis. Gender work, however, takes a great deal of time and location specific sensitivity. Much more attention needs to be paid to the integration of gender at the external support level. Within government water sector agencies, women are also underrepresented. Additionally, such agencies usually do not have a gender analysis capability. For agencies to acquire such capability, two actions must be taken. First male agents need to be trained in gender analysis. Second, more women need to be recruited. This would entail the encouragement of women to attend technical educational institutions, as
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well as the application of affirmative policies for hiring women.

5. The institutional linkages between government agencies working with women at the village level also needs to be strengthened. Unless the Ghana Water and Sewerage acquires a strong gender analysis capability, working with women at the village level will require continued input from government agencies which do have this capability, such as the Department of Community Development and Ministry of Health.
4. Appropriate financial schemes need to be integrated into project designs so that women are not burdened with water tariff payment. Income generating schemes may provide women petty cash but have been known to create more work for women without providing proportionate financial benefits. Much more attention needs to be paid to this issue if projects are to avoid placing additional burden on women in the community.

Fourthly, there is an urgent requirement to focus on the effective participation of women in water supply and sanitation projects. The participation of women should not be defined simply by the number of women sitting on committees, or by the fact that women are actively involved with water tariff collection or pump site cleaning. If women are not vocalizing their concerns at committee meetings, or are simply performing the routine labour needed to keep operation and maintenance systems afloat, this neither enhances women's well-being nor improves their status relative to men. It simply adds work.

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