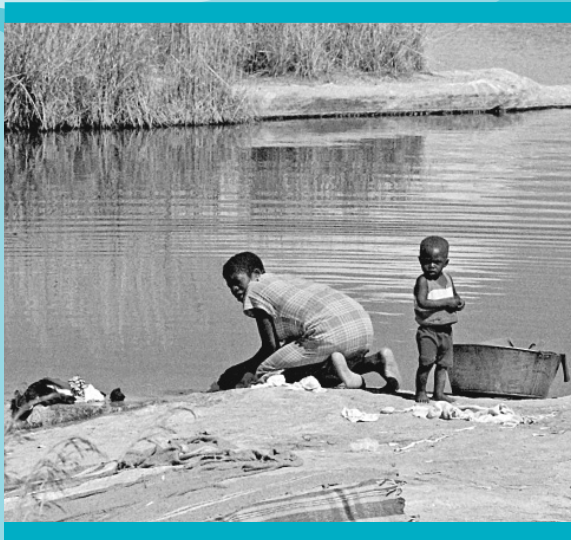


Gender, Water and Sanitation

Case Studies on Best Practices



**GENDER, WATER AND SANITATION
CASE STUDIES ON BEST PRACTICES**



**United Nations
2006**

DESA

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For further information please contact:
Office of the Special Adviser on Gender Issues and Advancement of Women
Department of Economic and Social Affairs
United Nations Headquarters
Two UN Plaza, DC2-1220
New York, NY 10017, USA
Fax No: (212) 963-1802

Foreword

Gender mainstreaming was established as the key strategy to promote gender equality and the empowerment of women at the Fourth World Conference on Women (FWCW) in 1995. The Beijing Platform of Action which was adopted thereafter articulated the strategy which has since become widely accepted. The United Nations ECOSOC Agreed Conclusions 1997/2 on Gender further underscored gender mainstreaming as an essential component of programme and policy related work at the country, regional and international levels.

Since 1995 gender mainstreaming as a strategy has been implemented in all sectors with varying degrees of success. Various tools have also been developed to support the strategy. Nonetheless, continuing challenges remain, especially linked to monitoring and evaluating the impact of gender mainstreaming on the condition of women and men. Some of these challenges are related to the absence of appropriate and context-specific indicators that can capture the impact of interventions to promote gender equality and the empowerment of women. Additional challenges include the absence of methodologies that assist replicability of successful interventions in order to speed up the pace of gender mainstreaming.

This handbook represents a set of 15 case studies on gender mainstreaming in the water and sanitation sector. It is meant to provide information, insight and evidence of how gender mainstreaming works in practice in many diverse situations. The best practices depicted here are a contribution towards closing the gaps that are evident in the implementation of interventions to promote gender equality.

I thank the Government of Norway for providing the necessary funds to undertake this project. Besides the production of these case studies, 15 experts were trained and are now in a position to continue documenting best practices in gender mainstreaming in various sectors in their own countries and elsewhere. In addition, a manual on a new case study methodology for documenting best practices in gender mainstreaming will be produced to provide a tool to a wider group of researchers.



Rachel Mayanja
Assistant Secretary-General
Special Adviser on Gender Issues and
Advancement of Women
United Nations
New York

Acknowledgements

The production of these case studies was undertaken by a team whose members included: Team Leader Wariara Mbugua, Office of the Special Adviser on Gender Issues and Advancement of Women, United Nations Department of Economic and Social Affairs (OSAGI/DESA); Dana Peebles, Director of Kartini International; and Nadine Jubb, also of Kartini International.

The process commenced with recommendations for researchers from the United Nations Inter-Agency Network on Women and Gender Equality (IANWGE). The IANWGE Interagency Task Force on Gender and Water chaired by Marcia Brewster (Division for Sustainable Development/DESA) was instrumental in identifying nationals who eventually participated in the research and in preparing the final document for publication.

The case study methodology workshop that took place in Addis Ababa was ably hosted by the Africa Centre for Gender and Development of the United Nations Economic Commission for Africa (UNECA). Deputy Director Wambui Karanja facilitated all the arrangements, while a consultant, Veronica Agbor, ensured that all the logistics went smoothly.

However, none of these case studies would have been possible without the commitment and the enthusiasm of the researchers themselves.

The Office of the Special Adviser on Gender Issues and Advancement of Women thanks everyone who participated in making this project a success. We wish to thank, in particular, our technical collaborators in this undertaking. The office was assisted by Dana Peebles and Nadine Jubb of Kartini International, a Toronto-based consulting firm that specializes in gender equality services. Our thanks also go to the UNECA Africa Centre for Gender and Development for hosting the methodology training workshop in Addis Ababa, Ethiopia. Finally, we are indebted to Marcia Brewster, Task Manager of the Interagency Task Force on Gender and Water, and her team – Margaret Garrison, Magano Ickua, and Jin Zhang – for their detailed scrutiny and finalization of the manuscript.

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Introduction

Wariara Mbugua, Principal Social Affairs Officer
Office of the Special Adviser on Gender Issues and Advancement of Women

The 15 case studies presented in this handbook depict best practices in securing sustainable safe drinking water and sanitation for communities by engaging both men and women as critical stakeholders. The case studies are drawn from 14 countries in Africa, Asia, Latin America and the Middle East. They illustrate what happens when communities become involved and actively engaged in addressing issues related to clean water and sanitation from a gender perspective. This perspective ensures that the concerns of women who have the primary responsibility for water are not only addressed but become part of the solution.

The case studies demonstrate that at the community level, solutions to clean water and appropriate sanitation problems are context-specific. One context that must be addressed is related to the prevailing gender systems and the attendant gender division of labour that determines women's primary responsibility for water in the household. Gender systems also determine the distribution of power between men and women. The case studies show that in pursuit of common goals and through dialogue, innovation, participation and collaboration, answers can be found that respond to the different interests of men and women in ensuring access to clean water and sanitation, and in the process break down many barriers based on prevailing traditional gender paradigms. It is successes such as these that become the building blocks to the realization of the Millennium Development Goals.

During its 58th Session, the United Nations General Assembly declared the period 2005-2015 the International Decade for Action "Water for Life," starting on World Water Day, 22 March 2005. It adopted resolution 58/127 which states *inter alia* that "the goals of the Decade should be a greater focus on water related issues at all levels and on the implementation of water-related programmes and projects, while striving to ensure the participation and involvement of women in water-related development efforts, and the furtherance of cooperation at all levels, in order to help to achieve internationally agreed water-related goals..."

The Decade is thus meant to accelerate the realization of the Millennium Development Goals, and in particular goal 7, which aims to "ensure environmental sustainability," and target 10, which seeks to "halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation."

According to the "Mid-Term Assessment of Progress" (2004),¹ the Joint Monitoring Programme of WHO and UNICEF stresses that extra efforts must be made if this target is to be reached. The report notes that:

- Without a sharp acceleration in the rate of progress, the world will miss the sanitation target by half a billion people.
- An estimated 2.6 billion people – half of the developing world – lack access to improved sanitation.

¹ World Health Organization and United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme, Meeting the MDG Drinking Water and Sanitation Target: A Mid-term Assessment of Progress. New York and Geneva, 2004.

- Despite major progress in South Asia, little more than a third of its population use improved sanitation; access to adequate sanitation in sub-Saharan Africa is only 36 per cent.
- Global population growth is cancelling many of the gains already made. Although more than a billion people gained improved sanitation between 1990 and 2002, the population without coverage declined by only 100 million.
- From now until 2015, greater effort must be made to reach the poor and those in rural areas, whose deprivation is hidden behind national averages.

In developing this project, the Office of the Special Adviser on Gender Issues and Advancement of Women had several objectives.

The first objective was to add to current knowledge the importance of applying a gender perspective in designing sustainable development interventions. These case studies show that a gender perspective leads to far more positive gains than originally anticipated. In fact, the community as a whole often reaps significant dividends. Benefits accrue to both men and women and this seems to tip the scale towards a shift in power relationships between men and women, whereby men, even in traditional communities begin to see the value and accept the need for change in women's roles. This is particularly borne out with regard to women taking on leadership roles at the community level.

A second objective of the project was to use a case study methodology for documenting best practices in gender mainstreaming in many diverse settings. To do this OSAGI developed a new methodology. This required critiquing many existing methodologies and extracting those elements of each that were most suitable. The result was a series of approaches that a researcher could use depending on the theme of his or her case study. The case studies therefore show the different choices of methodologies. A manual on methodologies will be produced separately so that other researchers can also benefit.

The third and final objective was to create a new pool of young researchers, men and women, for issues related to gender and empowerment of women. In November 2004, OSAGI invited 15 young professionals to participate in a research project on gender mainstreaming in the water and sanitation sector. The participants came from 14 different countries from various regions of the world. They came from highly diverse backgrounds and include academics, community activists, journalists and civil servants. Selection criteria included a track record of leadership in their field or community and experience in either water, sanitation or gender equality. The idea was to bring together younger professionals who are not necessarily linked to global movements so as to connect them with major development initiatives such as the Millennium Development Goals and in that respect, foster the development of a new network of gender, water and sanitation experts. Equipped with a sound methodology for documenting best practices, the researchers have lent their own voices to the case studies.

The three case study methodologies adapted for this research project include:

- The Harvard Business Case Study Methodology
- Appreciative inquiry
- Feminist analysis

The first two methods need to have a system of gender analysis integrated into them whereas the latter focuses more exclusively on women and the underlying patriarchal power structures that

affect their lives. The gender analysis tools selected to help the researchers analyze the data they collected from a gender perspective included:

- Practical needs and strategic interests comparison
- Access and control framework
- Empowerment framework

The research team had three months to conduct their research in their home countries. In the process they have documented stories and processes that otherwise would not have come to light. A common thread in their research results is that the integration of gender mainstreaming elements in each project, institution and programme has served to enhance the success of the water and sanitation programme. All the case studies offer powerful lessons to be learned about gender mainstreaming in practice. The case studies validate gender mainstreaming as a useful and important strategy, and reveal the processes that make it successful in different situations.

Case Studies (In order of presentation)

1. Sabrina Mello Souza – Brazil
2. Ghada M. Hamman – Egypt
3. Johdah Bokhari – Pakistan
4. Jabu Masondo – South Africa
5. Nila Ardhianie – Indonesia
6. Sena Alouka – Togo
7. Leontine van den Hooven – Guatemala
8. Luckson Katsi – Zimbabwe
9. S.H.M Fakhruddin – Bangladesh
10. Adekana A. Majekodunmi – Nigeria
11. Nana Ama Poku Sam – Ghana
12. Magda Lanuza – Nicaragua
13. Berna Ignatius Victor – India
14. Florence Ebila – Uganda
15. Sanganagouda (Sandeep) Naik – India

I. WOMEN'S LEADERSHIP AND EMPOWERMENT

A. CONSCIOUS FOSTERING OF WOMEN'S LEADERSHIP

1. BRAZIL: A Story of Women Leaders in Water Preservation

By Sabrina Mello Souza

Ms. Souza has a degree in Social Communication/ journalism from the Catholic University of the Rio Grande do Sul in Brazil. Her professional experience is quite diverse; she started as a trainee reporter with the Dalby Herald during her exchange student year in Queensland, Australia and then she worked as an assistant to the photography department in Zero Hora, a state newspaper in Brazil. This experience is complemented by her work in communications with the CREA-RS Association of Engineers and Architects of the State of Rio do Sul and CORSAN, the public State Water Company of Rio Grande do Sul. She has recently worked as a consultant for a US-based consumer's advocacy group on a food and water safety campaign in Brazil. Ms. Souza has also organized workshops for the World Social Forum in Porto Alegre, Brazil and has considerable experience reporting on social and community issues.

Case study methodology: Appreciative inquiry, feminist analysis

Introduction

This study concerns a project developed in the community of São João D'Aliança in the central region of Brazil, in Goiás State. It is 170 kilometres north of Brasília and is home to over 6,700 people (IBGE, 2000), most of whom work in agriculture.

In 1996, the local Union of Rural Workers initiated a collaborative partnership with the University of Brasília (UnB). In 2000, in response to farmers expressing concerns about the depletion of water in the area, the partners designed a water project to work with the community on this issue.

The project identified that there was a need to join efforts to stop pollution of the das Brancas River and destruction of the original vegetation. There was also a need to reduce constraints to women's participation in the community, particularly at the decision-making level.

This situation generated the 'Water Women' (Mulheres das Águas) project, which ran from April 2001 to February 2004, with funding from the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP). The women involved, with the project's encouragement, led a successful process of environmental education and river and vegetation rehabilitation. In the process, the project also strengthened women's political participation and changed public perceptions regarding their leadership capability.

Methodology

Between December 2004 and February 2005, the researcher collected data using group and individual interviews, field observations and a review of project reports and documents. This process included field visits to São João D'Aliança and Brasília. The project area covers seven communities in the municipalities of São João D'Aliança and Água Fria de Goiás. The investigation was based in São João D'Aliança because it had the majority of the project

participants. The researcher also organized a consultative workshop with ‘Water Women’ representatives, UnB researchers and community members who have supported the project. This provided a rich source of testimonies and feedback on project impact, and helped identify the common elements that contributed to the project’s success in gender mainstreaming.

Background information

The scenario

The study project area covers four rural communities and three land reform settlements located in the Brazilian central plateau in which much of the original vegetation has been cleared to plant cash crops. The municipality of São João D’Aliança does not have a sewage collection or treatment system and in the rural area 23 per cent of the 6,700 population use traditional means of accessing water (IBGE, 2000).

At various public meetings people raised concerns about:

- Water pollution;
- The disposal of discarded animal parts in the das Brancas River;
- Domestic waste deposits on the river banks;
- The impact of farm pesticide use on people and the environment; and
- The incidence of diarrhoea during the rainy season when run-off would drain these pesticides into the river.

These meetings also revealed an imbalance in gender relations stemming from a long heritage of male chauvinism. Indeed, it was only in 1934 that women were even allowed to vote and stand for election in Brazil (Ribeiro, 2004). In São João D’Aliança, even the women affiliated with the trade union did not have an active role, nor were their contributions perceived as important, regardless of their position within that community (Project Report, 2004).

Project approach: sowing seeds for work

The UnB and the Union explicitly introduced a gender perspective into the project’s design. The overall project objectives were to rehabilitate the river banks’ original vegetation and clean up the river in a women-led initiative involving teachers, rural workers and mothers that would foster women’s leadership. The proposed approach was designed to have each group (teachers, rural workers and mothers) adapt environmentally friendly practices to their everyday life activities.

The first step they took was to organize the existing group of women within the Union to visit and interview community members to:

- Tell them about the Water Women project;
- Identify what they felt was important about the river; and
- Obtain their support for future activities.

This first step motivated the women involved, as it allowed them to present themselves as leaders of an initiative that would contribute to the community’s development and build new social relationships and roles for themselves. The project’s technical consultant also noted that by their second house visit, the women already felt confident enough to conduct the interviews by themselves. They also held community meetings to promote public debate, organize project activities and mobilize public involvement. They then held a public hearing with the city councillors to share community concerns and explain project goals.

A collective effort was needed to plant native seedlings along the most depleted riverbanks to rehabilitate the soil, prevent erosion, restore the original vegetation and improve water quality and levels. The women's efforts were so successful that, by the beginning of 2003, the community had planted 9,200 seedlings.

The women also observed that many people did not feel responsible for garbage once it had left their own property. Subsequently, they organized a waste clean-up campaign. In addition to the actual clean-up, they organized a public exhibition of the garbage collected to provoke reflection about people's relationship with nature and how everything they do affects their quality of life, health and environment.

The project also encouraged the adoption of environmental education in 11 local schools by developing a teacher-training course on "water as an eco-educational matrix." This raised interest about water protection and conservation and enabled the teachers to integrate the issue in their school lessons. Students attended workshops on how to plant different species of seedlings. They got to choose what they wanted to plant and did a 'symbolic baptism' in which they joined their own names with that of the plant and conducted research to learn more about the species.

The women also organized a school-based contest in which the children competed in teams to see who could find the highest and most diverse number of seeds. Each team was also 'baptized' after a plant. The seeds collected were later used to establish 12 nurseries in the area. In a letter to the contest organizers, the winning team noted:

"We want to thank you for the rehabilitation of the local culture and the survey of stories that are so important to our history. How history is going to be written in the future only depends on us. Thank you for your determination in saving our so-loved and marvellous 'Water Planet'. We wish we could teach children, youth and adults to follow the example and hold up the flag of world preservation starting from our own back yard." – Jatobá team (Project Report, 2004)

Best practices

Women's participation in project leadership

A fortuitous circumstance also contributed to the project's success. At the project's beginning the local Union President resigned to take up a union position at the national level. He had led the design process and the project had been approved under his name. He was also responsible for other union activities, and thus it was at first difficult to find a replacement for him. Both the Deputy President and other key union members refused to take the position. Finally, a local woman rural worker accepted the challenge.

"I started in the project on a 'parachute'. I was replacing the president of the union for a short time. The project had just been approved and when I realized I had taken on lots of things at the same time, I had many difficulties. Many times I thought I wasn't prepared." – Maria Nila Crisostomo do Carmo

The project's technical assistant from the UnB is also a woman (Dr. Leila Chalub Martins) and the fact that women were in charge of both institutions leading the project presented a real opportunity to increase women's leadership in the community.

Nurturing a women's organization

The women's mobilization work was particularly effective. After nine months the entire community was familiar with the project. In January 2002, the women held a meeting to discuss what to do in the future, and more than 60 people attended it.

Discussion at this meeting was particularly intense due to a recent case of domestic violence. The woman concerned had denounced her husband's action publicly but had not been able to find protection or support from any of the town's institutions. Consequently, she had to return home and nothing happened to her husband – it was as if the community had condoned his behaviour.

This incident increased the awareness of both the men and women involved in the project of the need for the community to have access to women's rights organizations. In response, they decided to create an NGO to address these issues and continue their work. They named it 'Water Women' (Mulheres das Águas) after the project that had inspired it.

Men had also been involved in the project from its beginning. They worked to protect the new water plants, planted seedlings, created artwork and music to support the clean-up campaigns, etc. However, they were also aware that part of the project's purpose was to strengthen women's leadership roles and understood the principle that the new NGO would have a female committee of directors and decision-makers.

Gaining men's support was a slow process and participants in the group workshop reported that a couple of women who started in the project left "because of their husbands." The issue of male support was particularly challenging for the married women involved as they had to "persuade their husbands to participate." Today it is clear that the Water Women NGO has acquired respect and sympathy from the community's men. The women's determination and the involvement of an accredited institution such as the UnB both contributed to this process.

The Water Women NGO was launched in April 2002. Its mandate is to support the social and environmental development of the region through watershed conservation, with a focus on improving women's situation and human rights, generating new jobs and income, providing education to youth and adults and preserving the existing cultures and traditions of the *cerrado*.

Growing a local approach to gender mainstreaming

The interviews, field research and group workshop identified the following factors as having contributed significantly to the project's success in promoting increased gender equality:

- Inclusion of a gender mainstreaming approach in the project design, especially the decision to encourage and support women's leadership in all projects;
- Representation of women in key leadership roles in both institutions managing the project;
- Technical support from an interdisciplinary group from the UnB throughout the entire process;
- A participatory and reflective fieldwork preparation process and environmental education that motivated women to think about the connections between themselves, water and plants and their leadership role;
- Use of person-to-person contact to mobilize people. The women and University group went to people's houses, talked about the project, listened to people's stories, thoughts and concerns and invited them to join in the activities in a very personal way, giving women a much higher profile in the community;

- Use of diverse activities to enable women, men, girls and boys from different groups, ages and abilities to participate, including an active school level educational programme. The documentation and rehabilitation of regional traditions using local artists to tell the history of the river and create songs about the people and nature were subsequently recorded in a CD, while a group of young painters created illustrations and paintings about the environment and the Water Women project.
- Provision of courses on environmentally-friendly income generation activities for women, including techniques for growing local orchids and ways to use local fruits for jam, sweets and liquors. The courses were motivational, and the women learned that in the process of preserving their environment they could also find alternative ways to generate income.
- Provision of literacy courses for youth and adults by the women that emphasized environmental education;
- The impetus from an incident of domestic violence that brought to light the need for an organization focused on women's issues and rights; and
- The decision to create the women's NGO as both a project result and a factor that contributed to the project's continuation.

Results: reaping the harvest

Above all, Water Women provided an educational experience for São João D'Aliança. Through the project people were sensitized to look after the environment as a common responsibility to be shared by everyone. The project also gave women an opportunity to build their own political space and develop new relationships and roles. The creation of the new NGO is one indicator that they have developed the self-confidence and autonomy they need to take public decisions. In the group workshop some women indicated that the Water Women project has brought significant changes into their lives. Says Valdete Ferreira:

“I learned many things. I became a braver person. I used to live on a farm for 17 years, and even if I needed a needle it was my husband who would go to the city and bring it to me. In those times, my children were little. I had five children. I used to live locked up in my house. When I started going out, people used to say: ‘Look, that’s Jon’s wife!’ Nobody knew me because I spent a lot of time inside the house. After I moved to the land reform settlement and I got to know the Water Women project, I started participating in the meetings. If there is an attendance book somewhere you can be sure that my name is there for every meeting. I never missed one. I learned how to persuade my husband that I have to go out. Now when I leave, he even asks, ‘what *day* are you coming back?’ And I say: ‘What *day*? I am planning to go, but I haven’t made any plans to return yet!’ This is why I think that Water Women has changed me a lot. It encouraged me in a very special way.

“The biggest lesson that I have learned is about being useful. Sometimes we are very useful within four walls: to be the mother of the family, the housewife, all of this. But when you feel useful also in someone else's house, then there are values that were hidden and become revealed. Despite a lot of criticism that I have faced, I don’t care. I saw my importance and before that, it was probably somewhere there, in a hidden place.”

Stronger women change the environment

Other project impacts due to women's increased leadership role include:

Environmental impact

- The visible absence of waste in the river;
- The lack of domestic garbage by the river banks;
- Considerable growth of new vegetation of native species on the river banks; and
- Decreased soil erosion.

Community impact

- Increased community mobilization of people of all ages and backgrounds;
- Increased community awareness of their immediate environment, both as a group and as individuals;
- National recognition of the community through the awarding of third place for the 2002 Environment Prize von Martius sponsored by the São Paulo Chamber of Commerce and Industry Brazil-Germany;
- Stimulation of other local NGOs; and
- The recent participation in Water Women's activities by the municipal authorities and mayor (formerly the mayor was not supportive of the project).

Gender roles and relationships

- Men learned how to be group participants – and not just the bosses;
- Increased acceptance of and respect for women's new roles as community leaders;
- More equitable sharing of organizational tasks for community meetings between women and men with women no longer being relegated to simply preparing food;
- Increased involvement in community leadership by women from all walks of life: rural workers, teachers, students, activists, and church representatives;
- Increased and active participation of women in community meetings; and
- Formal recognition of Water Women's organization and leadership skills through their recent appointment to the mobilization committee for the local implementation of the national Zero Hunger programme.

Outstanding challenges

Achieving a space of their own and recognition in the community means that there are more responsibilities and will be more work to come. Some challenges that Water Women will face perceived by the researcher include:

- Developing new projects to support their work;
- Setting specific goals and indicators to evaluate their work;
- Maintaining momentum on the achievements to date through the on-going mobilization of volunteers;
- Disappointing results from the nursery programme (only two out of 12 are still active);
- Finding resources to monitor closely the actions already implemented;
- Improving their internal organizational capacity; and
- Finding ways to work in partnership with the city administration that target the education, health, environment, tourism and agriculture departments.

Water Women started out as an environmental education initiative that integrated a gender mainstreaming approach focused on the fostering of women's leadership in the community. In the process, the community's women have not only changed their roles and become more

empowered; they have planted the seeds of environmental education, water preservation and sustainable development in the hearts and minds of the people in São João D'Aliança.

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Acknowledgements

The author would like to express her special thanks to: Dr. Leila Chalub Martins, Professor, Department of Education and Coordinator, Sustainable Development Centre, University of Brasilia; Elvina de Souza França, the 78-year-old financial coordinator of Water Women; Maria Nila Crisostomo do Carmo, former President of the Union of Rural Workers; and Valdete Ferreira, Water Women Representative.

The author also wishes to thank all the Water Women and the people from São João D'Aliança who assisted the research process (Organização Mulheres das Águas, São João D'Aliança, Goiás, Brazil): mulheresdasaguas@terra.com.br.

2. EGYPT: Empowering Women's Participation in Community and Household Decision-making in Water and Sanitation

By Ghada M. Hammam

Ms. Hamman has nine years experience in various positions supporting the development of the economic, social/health and education sectors. Much of her work has had a strong focus on gender equality. It was while serving as a Project Manager for the Better Life Association for Comprehensive Development that she first encountered the gender-integrated participatory approach to water and sanitation development documented in her case study. Ms. Ghada has also worked as a trainer, a business advisor for small and micro-enterprises and a micro-credit loan manager. She has additional experience in community mobilization. Ms. Ghada has worked with multiple donors and is currently employed by the Participatory Development Program, a CIDA-funded project in Egypt that works to strengthen the capacity of promising civil society organizations.

Case study methodology: Feminist analysis, empowerment framework

Introduction

This study documents how the Better Life Association for Comprehensive Development (BLACD) used a gender-integrated approach as an integral part of the water and sanitation project they implemented in the village of Nazlet Faragallah in Upper Egypt from January 2003 to December 2004. Their participatory approach represents a best practice because it both increased women's access to water and sanitation resources and empowered them within the community. BLACD actively involved women throughout the planning and implementation process.

The project had three components: water connections; latrine installation at the household level; and hygiene education. Although it was welcomed by both villagers and local authorities, initially there was resistance to women's involvement. Community leaders insisted that only men serve on the project management committee. However, BLACD felt that it was essential to work directly with those who are responsible for specific tasks and focus attention on these groups as the primary agents of change. In Nazlet Faragallah this meant women, since they are responsible for water and sanitation in the village. Therefore BLACD established a network of women health visitors who were responsible for deciding who in the village would participate in the water and sanitation programme. The health visitors also provided hygiene education and collected funds to help pay for the new water connections and latrines. This ensured that both women and men were involved in the project's planning, the selection of beneficiaries, and household-level decisions to participate in the project, albeit in different roles and bodies.

Methodology

The researcher conducted the field research between December 2004 and February 2005. She collected data through interviews with project participants and by reviewing project documents. Her field consultations included a cross-section of project beneficiaries, BLACD officers and other stakeholders. Her data analysis focused on use of the empowerment framework and other feminist principles to assess existing power dynamics, women and men's access to water and sanitation resources and related changes before and after the project.

Background information

Nazlet Faragallah is located 15 kilometres north of Minia City in the Minia Governate in Upper Egypt, on the east bank of the Nile. Most of the 10,000 residents work as casual labourers in agriculture and have little predictable income. Many men also work in the nearby quarries to earn more money, but at some risk to their health. There is one primary school and one health unit in the village.

Prior to the BLACD project, more than half of the 1500 households in Nazlet Faragallah lacked latrines and access to clean and reliable running water. The most common preventable illnesses, including diarrhoea and kidney disease, were directly correlated to the lack of potable water and poor sanitation practices (BLACD, 2002).

The people of Nazlet Faragallah first approached BLACD for help after observing BLACD's successful installation of latrines and taps in neighbouring villages. One of the association's first actions was to recruit the health visitors who would encourage people to participate and contribute to the costs of the latrines and taps. They also raised awareness of sanitation issues and helped plan awareness campaigns. BLACD gave the health visitors training about water and sanitation, basic health, nutrition, child and reproductive health and first aid as well as communications skills. The health visitors met in pairs with project beneficiaries in their homes to share this information (Ramsis, 2004) and earned a small remuneration for this work. They also tackled sensitive issues, such as female genital mutilation, and received additional training to help them discuss these issues.

Before the project

In Nazlet Faragallah women are responsible for providing their families with water for drinking and washing and for waste disposal. Their main water source was communal hand pumps, but many families complained that the water coming from the pump had a yellow colour as well as a bad smell and taste (Ramsis, 2004).

Gathering water required a considerable amount of time and effort. Women had to make up to four separate trips a day to obtain adequate water. The time this took made it difficult for some to keep their houses and families clean. They had to wash their clothes and dishes in the canal where the water was contaminated with sewage. This exposure increased women's infection rates from diseases such as bilharzia. Other women had to rely on their neighbours' sharing their water, a source that was both unreliable and humiliating for many people.

Women generally collected human waste in jars or containers and disposed of it in the canal at night. This dumping practice had two negative consequences. First, the waste re-entered the water supply. Second, the women were exposed to potential infection during the waste disposal process. The lack of latrines meant that women and girls were frequently forced to wait until after dark to relieve themselves. This affected their health adversely as well as made them vulnerable to attack and sexual harassment.

Village power structures

Nazlet Faragallah followed traditional gender roles, and women had few rights. Most people have conservative views about appropriate roles for men and women. Men are considered to be the household heads, making most, if not all, decisions. Traditionally, women rarely took part in activities outside the home, and were fully occupied collecting water, looking after their children, and in other household tasks. They were unable to participate in external social roles and most were illiterate.

There are also legal obstacles to women's participation in community life. Many lack proper identification, since as women, it has not been deemed important for their births to be registered. The lack of identity papers has disenfranchised women and prevents them from accessing local services, a situation that is particularly difficult if the women are widowed or divorced. It also entrenches their less-privileged position in society relative to men.

Results

Nazlet Faragallah has a population of approximately 10,000 residents. The project was aimed at approximately 700 households without sanitary facilities; 60 per cent of the people targeted were women (BLACD, 2002). Through this project those households received two taps and a latrine each, giving them direct access to a clean, convenient source of water and a more sanitary means to dispose of their wastes. Household members also gained greater awareness of water, sanitation and other hygiene issues.

While all participants benefited from improved water and sanitation, women and girls derived the greatest gains because they had suffered more from the prior service deficiencies. The time and physical effort formerly required for their water and waste responsibilities no longer prevented them from engaging in other activities or to follow good sanitation and hygiene practices.

Women's involvement

A 2003 external review had recommended that BLACD needed to strengthen gender-mainstreaming initiatives within its programmes to increase their effectiveness. In response, BLACD was working actively to integrate gender considerations into its new projects. In Nazlet Faragallah this meant that the association needed to consider women as an individual target group during the needs assessment and implementation phases. This led to the development of the health visitor model in which women could still be actively involved at all levels despite male objections to their formal presence in project management. The health visitors participated by choosing the project beneficiaries based on agreed-upon criteria.

Women were also involved in the project's actual implementation, helping their male counterparts, including husbands to dig holes and carry supplies. They also motivated the men to pay for the water connections, since each household had to contribute to the water connection costs. Women's contribution to the construction phase significantly reduced the fees paid to the labourers as well as decreased the family's connection costs.

An unexpected result of the health visitor model was that many of the women wanted to continue their community activities after the project's completion. Therefore, they formed a small community development association. They have formally registered this association despite numerous obstacles, including a change in the registration law after the initial registration process had already been completed.

Health, security and self-esteem

Participants commented that the project had increased their health, security and self-esteem. While insufficient time has elapsed to collect health statistics, the health visitors have already noted changes in sanitation behaviour. The village neighbourhoods have also become cleaner and healthier, since people are more likely to use the latrines. They are also more motivated to clean up the streets as a result of their increased awareness about the spread of disease. Some women noted that their new latrines have also increased their security, since they have latrines in their own homes. They no longer have to wait for a socially-acceptable time and place to relieve themselves, a factor which is also good for their health and self-esteem.

Many beneficiaries cited increased self-esteem and dignity for women as being of utmost importance. The fact that the women are able to bathe more often has improved their sense of self and relations within the family, and they now feel more confident and less reliant on others. They are also proud of their water connections, and no longer embarrassed when guests ask for drinking water or to use the toilet. Men had also found the lack of taps and latrines humiliating and were pleased with their investment in the water connections. One newly married man was particularly insistent on connecting his new house to water supplies so his mother and wife would not need to ask for water from others.

Empowerment

The project empowered women in Nazlet Faragallah at a general level in that they were able to take a more active role in community and household decisions. It also helped create new formal positions of power for women through the health visitor role. These women not only made significant decisions affecting multiple community members, but also served as role models for both women and men, demonstrating that women are capable of effectively occupying a leadership role.

This increased empowerment did not come easily. Some health visitors faced opposition from male family members, as did some women who wanted to participate in the water connection programme, and they had to work hard to convince them to support their involvement. Some men had also been sceptical about the association the women formed. The BLACD project manager noted that one young man argued that “girls” lack the organizational skills and ability to run an organization and that it could not be sustained because the “girls” would marry and subsequently abandon it to perform their familial duties. BLACD’s response was to provide more support for the young women working to set up the association.

Other women felt empowered when, in order to guarantee that their households would gain access to water, they petitioned the local authorities to obtain the required paperwork. For most this was the first time they had requested any services from the local authority. Their desire to ensure their rights empowered them to act on their own and to take on what was traditionally considered men’s work. The women had the courage to do this, even though the project management committee had a male representative whose job it was to interact with the local authorities.

BLACD representatives also noted a “recognizable deliberate change in the structure of power and decision-making at both the family and village levels, as well as empowerment of woman to carry a community role, and participate in decision-making at the community level” (Ramsis, 2004). Women were involved jointly with their husbands in the decision on whether or not to participate in the water and sanitation scheme. Other women risked family disapproval to participate and even took this decision on their own (Ramsis, 2004).

Perhaps the greatest impact has been on the 20 health visitors. They report that their training and participation in the project has led to positive character growth, changes in their behaviour and attitudes and has strengthened their ability to express themselves and defend their opinions publicly. One health visitor observed that:

“We were just ordinary village girls...When we started working in the village and established the association, everything changed. Now we feel that we are stronger and influential and that we can make a difference in people’s life” (Ramsis, 2004).

These women, most of whom are in their 20s and 30s, now know every part of the village, have greater confidence and have developed exceptional interpersonal skills in comparison to other women and girls in their age group in rural Egypt (BLACD, 2003). One woman commented that her involvement had changed her from being socially isolated to someone who “had a role in the community”, even meeting local officials to raise concerns, something which they had been unwilling to do before (Ramsis, 2004).

Lessons learned

The Nazlet Faragallah project represents a best practice case study on many levels. Specifically, the project:

- Successfully integrated gender in the project in a traditional male-dominated community;
- Demonstrated that female health visitors can have a significant impact in the community;
- Significantly and visibly increased women’s empowerment in decision-making at the community and household levels, particularly with regard to issues affecting their own health, well-being and livelihoods as well as that of their families;
- Increased access for both women and men to water resources and sanitation facilities;
- Decreased the time spent (mainly by women) collecting water and cleaning up waste;
- Increased women’s security;
- Supported the creation of a women-led community development association;
- Provided a basis for women seeking other rights in addition to access to water;
- Increased the likelihood of achieving other development objectives; and
- Demonstrated that women’s increased involvement made the long-term success of this water and sanitation project more likely.

At the same time, this model also reveals continuing obstacles to women’s empowerment in the region. Existing power structures hinder their empowerment, particularly at the management level. Some organizations also perceive that there is a conflict between their desire to respond to the needs of marginalized communities and to promote changes in traditional gender roles. This project has shown that, not only is it possible to achieve both goals, but also that the focus on increasing gender equality and women’s empowerment actually contributed significantly to the project’s success.

The project provides an effective model for implementing a participatory, gender-sensitive water and sanitation programme and shows how this approach can form the basis for women’s participation in other activities. It further demonstrates that women’s active participation in water and sanitation projects is essential because of their key roles in providing their households with water, sanitation and family care. The project also recognized that women and men had to work together in a partnership to be effective and fostered increased collaboration between the two sexes at the household level. In the long run, this project and the action models it created represents one of the best mechanisms to both increase women’s involvement within their community and to improve community health.

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Acknowledgements

Special thanks to Mr. Maher Boushra (BLACD Director) for his helpful support and to Ms. Rachel Ziemba for additional editing assistance.

B. WOMEN TAKING CHARGE

3. PAKISTAN: Initiative of One, Relief for All – Women’s Leadership in the Banda Golra Water Supply Scheme

By Johdah Bokhari

Ms. Bokhari has nine years experience in designing and conducting research studies, surveys and evaluations, with special emphasis on the participation of women in the water sector, children’s issues, NGOs and community-based initiatives. She has particularly strong skills in the development of research instruments, and has completed over 20 individual and group research assignments as a consultant, team leader and senior team member. She has been a consultant with the United Nations, international and bilateral agencies, as well as national organizations. She also serves as one of the two Coordinators of the Women and Water Network established in Pakistan in 2001 to bring women from all sectors of society to help them channel their voices effectively into mainstreaming gender in actions related to water.

Case study methodology: Feminist analysis

Introduction

Banda Golra is a small village located 10 kilometres from Abbottabad in Pakistan. It has approximately 120 households scattered over the hillside. The average household has eight members. Most men work as day labourers. Women work primarily at home, manage livestock and do other household work.

Access to water has been a problem here for decades. The village’s only water sources were two natural springs located on a mountaintop and in a deep valley. The village livestock and wild animals also drink water from the same sources. In this area, collecting drinking water is the women’s responsibility, and it takes three to four hours every day to complete this task. Obtaining water for livestock and other household purposes has required another full day every week. During the dry season, women would have to sit all night at the springs just to get two buckets of water.

A government pipeline also supplies water to the area’s villages, but there are only four connections to Banda Golra. One is for the mosque; two were installed privately; and only one is communal. The pipeline water only runs twice a week and is not sufficient to meet local water demands. Given these circumstances, the need for improved access to water was urgent. In Banda Golra, the village women, through the leadership of one woman, Nasim Bibi, motivated the entire village to organize their own water supply scheme.

The story

The village water supply scheme was initiated by Nasim Bibi, who needed money to help construct her house. She had heard about the Sarhad Rural Support Programme (SRSP), a regional NGO that provided credit in the area. Nasim contacted SRSP to apply for a loan, but was informed that the organization only lends money to community-based groups.

Undaunted by this first refusal, Nasim Bibi mobilized the women of the community and formed a women’s community-based organization (CBO) in 2002. Nasim Bibi’s daughter, the only

educated young woman in the village, was responsible for maintaining the group's minutes and records.

CBO members started a saving scheme with each member depositing Rs.10 (US\$ 0.16) every month. In addition, over a two-year period, 21 women received loans from SRSP for household construction, weddings and to purchase livestock, all of whom have successfully repaid the loans.

During their monthly CBO meetings the women identified increased access to water as a priority for action and passed a resolution to develop a village water supply scheme. This case study documents how they succeeded in bringing water to their village, the strategies the women used to gain acceptance for the water scheme and their new leadership role in their village.

Methodology

The researcher used feminist analysis to examine the underlying power structures within the community and conducted interviews with the villagers. The interviews included women from the hand pump groups, Nasim Bibi, women who did not participate in the scheme and male villagers.

Background information

Power structures

The interviews showed that the men in the village exercise greater decision-making power than women. Most of the women interviewed have large families (six to eight children each), simply because their husbands would not allow them to use family planning methods.

The men own and control most of the village resources, including houses and land. According to the state and Islamic law women can inherit property, but in most cases they do not receive their inherited property or are pressured to waive their inheritance rights in favour of their male relatives.

Education

Most women in the area are illiterate, while most men have a primary education. There is increasing awareness in the village about the importance of education due to community exposure to the media, so most families now send their children to a primary school four kilometres from the village. However, girls only attend until the fifth grade because, once they reach puberty, *purdah* (the practice of seclusion of women from public observation) is strictly observed.

Health and sanitation

During the summers, diarrhoea is a major health concern among the children. Community members generally understood the correlation between diarrhoea and poor water quality from the springs. There are only five latrines in the village, and these are located in the homes of influential villagers. Therefore, most villagers have to use open fields.

Best practices

Water supply scheme initiation

Initially the women's CBO developed slowly with an average of 60 per cent of their members participating in the monthly meetings. The women noted that the water supply issue was raised at almost every meeting. A year after they started the CBO, this on-going discussion led to the passing of a resolution intended to start a water scheme that would meet the village's water needs more efficiently and reduced the burden that water collection placed on women.

Initially the Sarhad Rural Support Programme rejected the CBO's idea of a water scheme. However, with the advocacy efforts of Nasim Bibi and other CBO members, SRSP finally agreed because the women's CBO agreed to take on full responsibility for the project's management and they had an outstanding loan repayment record.

The water supply scheme involved installing seven new hand pumps in different locations in the village. The community had to contribute 20 per cent of the costs and SRSP 80 per cent. Each participating household had to contribute Rs. 1000 (US\$ 16), and each hand pump was financed by a group of seven households.

Women's leadership roles and contributions

Some women from the participating households were already CBO members. They mobilized their households and worked to get the support of their male relatives. Since it is a small village, the initial group of women involved was mostly Nasim Bibi's relatives. They had full confidence in her due to the credit scheme's proven success.

It is important to note that Nasim Bibi comes from a poor family. She has no land to cultivate and her husband is a construction worker who only gets work on a daily basis. Her husband has very liberal views on gender roles and supports Nasim Bibi in her work as an activist and social worker and in sending their daughters to school. During his interview, he strongly criticized the behaviour and attitudes of other village men in restricting girls' educational opportunities and women's right to work independently. His support of his wife's leadership helped her considerably in the organization of both the credit and water schemes.

Nasim Bibi's leadership helped other women become involved as community leaders. The women's CBO formed three committees to manage the project. These included:

- *Project Committee* – responsible for the purchase and actual installation of the hand pumps: two women and three men;
- *Audit Committee* – responsible for financial auditing and bill payment: two women and three men; and
- *Maintenance Committee* – responsible for providing regular hand pump maintenance: two women and two men.

The work the women did on these committees took them out of their traditional reproduction-focused gender roles. It involved them both in public leadership and in taking on non-traditional tasks such as pump maintenance. Nasim Bibi herself was on the Project Committee and purchased all the equipment, hired the labourers and monitored the project's implementation, in essence, serving as the water scheme project manager.

Other contributions by the women

The women of Banda Golra also contributed to project implementation. Every participating household had to take turns providing food and accommodation for the labourers engaged in drilling boreholes and installing hand pumps. Village women also collected enough water to help soften the ground for drilling and to support construction of the hand pump platforms.

Community involvement

Households that did not participate initially had thought the scheme was a fraud, and that Nasim Bibi would keep the money collected for herself. They were also concerned that drilling a well for a hand pump would be difficult because of the area's rocky terrain. However, after the

successful installation of the new hand pumps, these households regretted not having joined. They have now committed themselves to contribute to any new village water schemes, as well as to maintenance costs for the recently installed pumps. Despite the fact that some households did not contribute to the initial water scheme, they are allowed to use the hand pumps.

Results

The women's water supply scheme has led to the following changes and impact on the village:

Decision-making power

- Increased decision-making power at the household level for the majority of women involved in the water and credit schemes;
- Recognition of the value of women participating in public activities and how this could benefit their husbands and families directly through gaining increased access to new services such as credit and water;
- Increased recognition of the ways in which women contribute to bettering their family's economic situation; and
- Open discussion of health issues related to frequent pregnancies; many women up to 35 years old report that they are now able to decide to keep their family small.

Time saving

- Significant increase in time available for other activities, with most women indicating that they use this extra time for family and group meetings; girls use it for embroidery and sewing for themselves and their families;
- Decreased pressure and stress for women;
- Improved women's social relations outside their homes; and
- Increased sense of independence due to greater social mobility.

Health, hygiene and sanitation

- Increased frequency of clothes washing from a weekly to an almost daily basis;
- Increased frequency, convenience and privacy of bathing for families, particularly women and girls, as they no longer have to walk to the spring to bathe;
- Increased sense of security regarding the cleanliness of their new water sources (since the hand pumps have only been in place for five months the village has not had a chance to see if this new water source is cleaner than the springs in the dry season) ;
- Decreased contamination of the new water sources due to animal waste; and
- Increased understanding of the importance of sanitation in the village: the women interviewed indicated that they plan to propose a village sanitation scheme at their next CBO meeting.

Increased CBO membership

There is a significant increase in the number of new CBO members, with new members now finding that they are receiving support for this activity from male family members, unlike before, when they met with considerable resistance.

Changing attitudes

The attitudes of men and women who did not participate in the scheme have changed significantly from the project's beginning. They now perceive this type of activity as something that is being done on behalf of the entire community, and are no longer suspicious of it. They also

see women's participation in the CBO as something positive that could benefit their entire family, particularly in terms of gaining increased access to credit.

Indirect impact on education

Girls' access to education has increased due to Nasim Bibi's daughter having recently established a non-formal school in the village that offers both primary and secondary classes.

At present there are 23 children (20 girls and 3 boys) enrolled at the non-formal school. The high number of girls enrolled is a result of the special efforts of Nasim Bibi and her daughter. Those interviewed noted that it was because they have confidence in Nasim Bibi and her daughter due to the successes of credit and water supply schemes and because of the fact that parents prefer to send their daughters to a school that is close by.

Creation of role models

The project also made role models out of participating women by:

- Increasing the respect of male community members for Nasim Bibi in particular, and for the other active women members of the CBO; and
- Increasing acceptance by men that women can be effective community leaders. One respondent even observed that if Nasim Bibi ran for Councillor in the local elections, she would definitely win. This would have been unthinkable prior to the water scheme.

Nasim Bibi has acquired the respect and confidence of the community through her hard work on their behalf. Through this process she has become an informal community leader, especially for the women who come to her for advice and moral and financial support. Now village men also come to her for advice and help. After the successful completion of the credit and water supply schemes, they see her as a person with strong linkages with NGOs and often come to her for help seeking jobs and credit.

Lessons learned

This case study demonstrates how strong personal leadership, when supported in strategic ways and at strategic times, can lead to significant positive results for increased gender equality as well as improvements in water and sanitation. Nasim Bibi had the courage to step outside traditional gender roles in her village, even though she is poor and had no real power base or influence in the village. Yet the support of an external NGO stimulated her to organize a women's community-based organization.

This CBO, because it was able to address the women's immediate financial needs and because the women were able to provide additional financial support for their families through the SRSP micro-credit scheme, helped the women gain increased respect from male family members as well as increased decision-making power at the household and community levels.

The CBO members provided support for Nasim Bibi's leadership when she had to advocate on behalf of the village first with SRSP, and then with the village men to get them on her side for the water supply scheme. SRSP's condition that the CBO take on the project management also had the impact of empowering the women, as it gave their new leadership role validation and credibility from an external organization.

The women's CBO was able to gain men's support for the water scheme because it started with a base of people who trusted each other due to their familial relationships and because the

members' male relatives realized that the women's participation was benefiting the entire family and helping support the men in their role as household heads. This helped the women gain male support for the water supply scheme, as did the fact that the women consciously involved the village men in a shared management model in the water scheme.

All of these factors came together to increase community access to clean water, lessen women's burden, and improve family and community health. They have also empowered the women of Banda Golra and confirmed them in a new leadership and decision-making role. And all this occurred because SRSP first said "no" to a request for a loan.

4. SOUTH AFRICA: Women in Sanitation and Brick Making Project, Mabule Village

By Jabu Masondo

Mr. Masondo recently returned from a year's work with the International Resource Centre on water supply, sanitation and hygiene in the Netherlands and is currently serving as the Communication and Advocacy Officer for the Mvula Trust in South Africa. He has also worked in the communications field with the South African Department of Water Affairs and Forestry. His work for these organizations has focused on gender, water and sanitation issues. In addition to his communications background, Mr. Masondo has a strong grounding in the arts, having served as the Drama Coordinator for the Water Support Unit on a project funded by the United Kingdom's Department for International Development (DfID) and as the Director/Producer for a community theatre programme. He is also a painter and works in abstract acrylics. Other skills include event coordination, workshop facilitation and editing and production of newsletters. He speaks seven languages.

Case study methodology: Feminist

Problem statement

Mabule village is 131 kilometres west of Mafikeng town in the North West Province of South Africa, near the border with Botswana.

In this village, the high prevalence of diseases such as cholera was due to its unhygienic environment. The major problem was a lack of suitable sanitation facilities. Little attention was paid to personal sanitation and some households had toilet structures made of wood and plastic sheets, which could not survive heavy rains. The nearest water source was in a nearby village 10 kilometres away. For many women and girls, visiting the toilet had become uncomfortable as the home-made structures were generally unclean, odorous and fly-infested with such poorly constructed walls that people outside could see in. Boys and men often relieved themselves in nearby bushes. The lack of hygiene-awareness, scarcity of basic building materials, such as bricks, and the villagers' low skill level made it difficult to change this situation.

The Mabule Sanitation Project was developed to respond to these problems through a joint initiative of the Department of Water Affairs and Forestry (DWAF), the community and the Mvula Trust. The latter is the largest NGO implementing water and sanitation projects in South Africa and has constructed more than 70,000 toilets in communities and schools around the country using an approach that focuses on women's empowerment.

Methodology

The researcher interviewed five key informants from the project, including the project committee chair and sanitation and brick-making project members. He also reviewed project documents and other related reports.

Background information

Mabule Village has 450 households. Before the sanitation project's implementation, the villagers did not see any real problem with local conditions. The level of education is poor and 90 per cent of the community live on pensions that come from the government. They collect water from

springs or walk 10 kilometres, for about three and a half hours, to fetch water from the nearest village. Donkeys and cattle carts are used for transportation.

Mabule's men are generally migrant workers. Their absence leaves women with the full responsibility for child rearing, eldercare and feeding the family, as well as time consuming tasks such as firewood and water collection.

The South African government's water and sanitation strategy has been to ensure that women participate fully in service development since it is women who have primary responsibility for water collection and who generally ensure that the services developed meet everyone's needs.

The Department of Health (DoH) had been carrying out health-related activities in the Mabule Village area, but the programmes had not been effective in changing the community's attitude and behaviour towards good hygiene. Their programme included educating people on issues such as preventive healthcare for children and the environment. A few community groups had been established to deal with different activities, but people did not have a sense of ownership in those groups or an understanding of what they were supposed to be doing. Most importantly, the DoH's programme lacked an integrated gender approach.

In mid-1999, Mabule village's Chief convened an urgent meeting of the *Lekgotla* (in Tswana, a meeting where community matters are discussed, with the Chief presiding) to discuss grievances brought by a group of women about the village's deteriorating health and hygiene situation. Other meeting participants included representatives from the Mvula Trust, the DWAF and the DoH. It was a difficult meeting as traditionally, men, women and external visitors did not meet together. At the meeting, women noted that the DoH's training had not made an impact on the hygiene and health of the community.

Impressed with the Mabule women's commitment to developmental change, the Mvula Trust and the DWAF assured project resources and material amounting to Rand 572,700 (US\$ 70,000) for the Mabule Sanitation Project. The project was run by a project management committee that was elected by the community, which established clear criteria for membership eligibility. Due to the educational criteria, women who had benefited from the DoH's previous education programmes were elected to fill eight of the 10 seats.

Part way through the project's implementation a delay in funds from the DWAF led to the establishment of a brick-making project to obtain materials for latrine construction and generate cash. This second project started in early 2004 with the establishment of another project management committee and the requirement that participants contribute US\$ 6 each per month to buy materials and to pay for the two machines needed.

Best practices

Use of gender analysis tool

As the integrated sanitation and brick-making projects both faced gender-based constraints and challenges, the Mvula Trust used a gender analysis tool to help focus the community's attention on gender roles and responsibilities and to integrate a gender-sensitive approach to the project. It promotes a process called Participatory Hygiene and Sanitation Transformation (PHAST). This tool assisted them to:

- Sensitize people to gender issues in the context of their community;
- Quantify the time constraints women and men faced related to water and sanitation;

- Highlight how such constraints affected women and men's participation in projects; and
- Explore in a sensitive and unthreatening manner whether and how gender roles and responsibilities could be altered.

Training in this diagnostic tool was initially provided to 40 villagers, two-thirds of whom were women. It assisted the trainees in assessing the sexual division of labour related to normal everyday tasks such as cleaning, fetching water, cooking, and looking after cattle. Allocating each task individually served to highlight the differentiated gender roles and responsibilities of men and women in the village. This analysis was shared with the rest of the community at the *Lekgotla* and greatly assisted men in understanding the importance of women's work and their contribution to the community.

Women's involvement in construction

Seven builders and 10 diggers were trained to build latrines. However, some of them quit because they had expected higher wages and others because they lost interest in the project. In response, other community members stepped in, and both men and women began participating by digging, carting away the soil and mixing the cement and sand to build each toilet structure. This represented a change in gender roles, as formerly women would not have been involved in this kind of construction work.

Increasing women's voice

Women's voices were heard at two levels. At the community level, the women became aware that previously men had been making decisions for the entire community without their consent or input. This increased awareness led the women to negotiate ways to ensure their full participation in the project's planning and implementation.

At the government level, the DWAF representative recognized that the women's welfare must be considered. Therefore, DWAF introduced a policy to fund sanitation projects only when there was a gender balance in terms of decision-making. The Chief of Mabule also understood that the sanitation and water issue affected women's welfare deeply, and that the project would resolve more than just unhygienic practices in his community. One of the female brick makers observed:

“I'm very old, my son, as you can see, but I will not stop working for this community. In our era there was nothing like a woman working or leading community projects. So this is my opportunity to learn and teach others that women are strong and that they can do it.” – Mosadiwantwa Modiseemang (female brick maker and member of Mabule Sanitation Committee)

Overcoming resistance to women's participation

The community did not initially support the idea of women leading the development project. The Municipality did not want to let the women open a bank account because they felt that the project committee did not have enough skills to manage funds. Some community members said that the committee would not survive because women talk too much and others had personal vendettas against certain women members. Some husbands did not approve of their wives participating, especially in a sanitation activity, as in this part of South Africa it is still taboo to talk about sanitation issues.

The Mvula Trust responded by organizing workshops to educate people about gender issues, the different roles which men and women can play in the community and how they all could benefit from increased gender equality. These workshops helped change men and women's minds and finally led to the decision of the community and municipality to give the female committee

members access to project finances and the authority to implement project plans along with the men.

“I have never realised the potential the women have in this community. I thought it was only men who make things happen in a given community. I would like to appreciate the working together we have between our women and us (men). It’s a wonderful combination. Now children are growing and they are assisting in making bricks and in that way the community is being developed. We both can stand together in a holistic manner.” – John Malunga (male member of the brick-making project)

Building women’s leadership

The project committee members took part in an intensive five-month training programme from mid-1999 to January 2000. The training worked on developing community-based project management, including writing skills, finance, book-keeping, project management and women’s leadership. The committee met three times a week over this period to engage in learning and to map out the roles each would play. The committee’s chair and Mvula Trust’s representative played a crucial role in motivating members in the face of men’s opposition. In the end, it was women and men’s joint participation that was the key to the project’s implementation and success.

“A group of empowered women is more powerful because it can challenge and uproot every structure and issue that blocks development in the village and so ensure better living conditions.” – Mosetsanagape Bogale (Project Committee Chair)

Community ownership and involvement

By mid-February 2000, the committee had developed a skit, which depicted the dangers of being unhygienic. It showed people not washing hands after defecation, community toilets falling apart, people defecating in public places, and people with cholera. It also illustrated how a community can be divided if decisions are taken only by men. The skit included pauses to allow the audience to raise questions or clarify scenes. Through this process, even though toilet construction had not yet started, the project committee was able to make the other villagers aware of the benefits of good hygiene. Committee members also made house-to-house visits to explain about good hygiene behaviour in more depth. This sensitization process increased the community’s control and ownership of the project and also helped gain acceptance for the changes in gender relations taking place.

Some committee members continued their health and hygiene promotion and training activities in the community even after the latrines had been installed. These integrated activities demonstrated how effective it was when the community worked together, gave them a deepened sense of what was happening and illustrated that they were in control of the process.

Results

Women’s empowerment

- Women’s voices are now being accepted and heard by men, the supporting NGOs and related government agencies;
- There is increased respect for and acceptance of women’s leadership roles;
- There is increased collaboration between women and men;

- The committee's women have now learned to manage the life cycle of a project inclusive of participatory planning, finance management, ordering materials, recruiting and training builders and supervising latrine construction; and
- The women now receive strong support from husbands when delivering sand for making bricks and collecting water for both the brick-making project and family needs.

Water and sanitation

- The community now has safe, hygienic and attractive toilets, with the majority of toilets being the Ventilated Improved Pit (VIP) latrine type; and
- The community is experiencing improved health and hygiene, including more dignity and privacy for both women and men with regard to waste evacuation.

Community development

- The brick-making project has employed up to 10 people: four men and six women;
- The community has increased access to a supply of affordable bricks for construction purposes, including latrine construction;
- Other related income-generating activities have been established, such as a donkey cart service for delivering bricks locally and to surrounding communities; and
- There is more money being retained in the community by both women and men.

Lessons learned

Based on sound strategic project planning, appropriate and affordable technologies, training and capacity-building and the support of experienced institutions, the Mabule women continue to initiate other community development projects. Underpinning their success is their desire and ability to facilitate change through dialogue with their male partners. They attribute the following three components to the project's success:

- Creation of an enabling environment for women to participate, e.g., scheduling meetings when women could attend and providing financial support to compensate for the time they spent in meetings, training and workshops;
- Provision of skills training, particularly for women participants; and
- Creation of a synergy between the supply and demand objectives of the sanitation and brick-making development projects.

Others involved in the project's implementation also noted the importance of:

- Integrating the interests and common welfare of all stakeholders (women and men) into project design and management;
- Using diverse approaches that were designed for wide participation to promote changes in hygiene behaviour;
- Directly addressing gender discrimination and inequalities;
- Explaining to community members that both men and women would benefit;
- Increasing opportunities for men to work alongside women in diverse roles;
- Including the city councillors in project training;
- Supporting the development of problem-solving skills among the project committee members;
- Using a high quality model of toilet to create increased pride in the community; and
- Facilitating cost savings for both men and women throughout the project.

All those interviewed agreed that strengthening and supporting women's leadership was essential to the community mobilization processes and that women's leadership in the project management committee contributed immensely to the project's success.

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II. GENDER MAINSTREAMING IN ADVOCACY

5. INDONESIA: The Impact of Women's Participation in the Aqua-Danone Advocacy Programme -- A Case Study in Klaten District, Central Java

By Nila Ardhianie

Ms. Ardhianie has been working on advocacy and community development projects for more than 10 years, with a particular focus on water resources and pesticide problems. She also monitors participation and has conducted related research in West Kalimantan, Riau, Java and elsewhere in Indonesia for World Bank projects. For the past four years, she has been concentrating on issues related to water policy reform, and has reviewed the new policies, institutional changes and regulations taking place in Indonesia. She has also been doing intensive advocacy work and information dissemination on Indonesia's 2004 Water Law and has particular concerns about the impact of the trend towards the privatization of water. Prior to her experience in the water sector she worked with a wide variety of groups, including government officials, the private sector, academics, NGOs and farmers.

Case study methodology: Appreciative inquiry, empowerment framework

Problem statement

In 2002, when Aqua-Danone first started its bottled water plant operation in the Klaten District of Java, people in the surrounding communities did not realize its significance. The company was extracting a huge quantity of spring water just 20 metres away from the Sigidang spring, the area's primary water source. The community, consisting mostly of farmers, began to realize that there was a problem when they found their access to irrigation water decreasing and their wells starting to run dry. Farmers now have to rent expensive electric pumps to obtain their irrigation water. Pumping groundwater for irrigation purposes also dries out community wells. Therefore many people had to start buying drinking water privately or from their neighbours. Some farmers have been forced to stop farming and to seek work as construction workers or market labourers.

Women in the communities affected have also found this situation difficult, since they have to obtain water every day. Culturally, as their social status is low, women were traditionally 'followers' of men and key decisions were made by their fathers, husbands, and brothers.

In response to these water-related problems, on 7 March 2003, community members came together to establish an advocacy group, the Klaten People's Coalition for Justice (KRAKED). Despite prevailing cultural values, the programme also gave Klaten's women the opportunity to participate in the advocacy activities, which had a positive impact on both themselves and the organization.

Methodology

Data collection was done mainly through focus group discussions and in-depth interviews with various community stakeholders, including, for example, the local government. Programme reports were used to get background information, including the situation of women and an assessment of their participation in the organization. The survey work involved eight women and six men who were involved in the programme and five women and men from the targeted community who were not involved in the programme. She held five small focus group

discussions with seven to eight participants each, consisting of representatives of men and women who have been involved in the programme and those who have not been participating.

Background information

In 2002, Aqua-Danone started operations of a bottled water plant in Klaten, Central Java. The company's well was drilled beside the Sigedang spring and surrounded by a small building called the source house. This is guarded by security guards all the time and is closed to outsiders. The company has also built fences around the source house and posted "Do Not Enter" signs.

The company brings the water from the source house to its bottling plant using pipes that stretch for two kilometres. There it is put into containers ranging in size from 300 ml to 19 litres. Every month, the plant produces 15-18 million litres of bottled water. Based on this information, it is estimated that the company earns Rp. 34.8 billion (approximately US\$ 3.6 million) from this factory every month (INFOG, 2004b).

The provincial government gave Aqua-Danone a license to extract water at a rate of 23 litres per second. The company states that until the end of 2004, they were only using 13 litres per second of their allocation (INFOG, 2004a). However, when the Minister of Settlement and Regional Infrastructure visited the factory in February 2004, he found that they were actually extracting water at 86 litres per second (Tempo Interaktif, 11 February 2004). After this visit, a high-ranking ministry official threatened to close down the factory if the company continued this practice. During that same month, Aqua-Danone is on record for having extracted 26,811 m³ of water – which was clearly still at an excessive rate (Solo Mining and Energy Management Office, 2004).

Despite this high level of water resource exploitation, the company only pays the government Rp.3 million (US\$ 300) a month in Groundwater Tax (INFOG, 2004b). To maintain a good relationship with the community, Aqua-Danone also pays the village where the factory is located Rp.1 for every litre of water they sell. This comes to approximately Rp. 18 million (US\$ 1,900) every month.

However, it is not the money that matters most, but the drastically decreased water supply in the Klaten district due to the plant's operation. A year and a half after the factory opened, wells within a three kilometre radius have started to become shallow and dry up during the dry season, formerly a rare phenomenon in the area. Prior to the plant's establishment, water from the Sigedang spring would flow freely year round as far away as 12 kilometres. A measurement made by the Indonesian Forum on Globalization in August 2004, found that communities living three kilometres from the spring are now starting to experience water shortages and the negative impact is spreading to greater distances.

KRAKED's main objective is to close down the Aqua-Danone plant in Klaten. Their short-term objective is to reduce its extraction rate and establish a community monitoring system. KRAKED itself is a coalition of community organizations; the Indonesian Forum on Globalization (INFOG) is one of its members. A coordinator, secretary and treasurer serve as the primary managers.

Best practices

Women's involvement

Fortunately, when KRAKED was founded, it did not restrict its membership to men. Its founders had not been aware that by establishing an open membership policy, the organization would be contributing to women's empowerment, as well as strengthening the organization's impact. At

that time, their main consideration was to get as many people to participate as possible in order to generate a greater understanding of water issues in the community.

The women involved in KRAKED were highly motivated to participate in the programme. In the earlier meetings their role was restricted to preparing food and drink for other members. However, in March and April 2004, KRAKED set up a research project to get a better picture of the impact of Aqua-Danone's Klaten operations. They conducted the research in eight sub-districts and compared conditions encountered by farmers and local communities with regard to the water supply. Eight women and a couple of men offered their time to conduct the research. For the women, it was their first 'meaningful' activity in an advocacy process. It ultimately opened their way to become even more involved.

Some factors that fostered the participation of the women members in the advocacy programme included:

Previous experience

KRAKED was not the first organization in which the women had been involved. A number of women were also members of a Small Entrepreneurs Network for Women that had successfully established a women's cooperative in Klaten. Initially, two NGOs helped the network members develop ways to increase family income through small business operations and provided training to the women in administration and personal development.

Financial independence

Unlike most women in Klaten who work in the home and are housewives, most of KRAKED's women members have their own small businesses. While their income tends to be less than that of their husbands (ranging from 15 to 60 per cent), in one case the woman earned 60 per cent more than the men. Having their own income has given the women independence and more confidence to participate in activities outside the home. Because of this extra income, the women were also relatively well-off financially by community standards. Since their immediate practical needs had been addressed, they therefore had more time to spend promoting strategic advocacy interests in the community.

Table 1. Comparison of monthly income of KRAKED women members and their husbands

(1 USD = Rupiah 9,500)

	Subject 1	S2	S3	S4	S5	S6	S7	S8
Wife's Income (Rupiah)	300,000 \$ 31.6	200,000 \$ 21	200,000 \$ 21	300,000 \$ 31.6	250,000 \$ 26.3	800,000 \$ 84.2	150,000 \$ 15.8	-
Husband's Income	1,500,000 \$ 158	400,000 \$ 42	500,000 \$ 52.6	500,000 \$ 52.6	1,000,000 \$ 105.2	500,000 \$ 52.6	1,000,000 \$ 105.2	800,000 0 \$ 84.2
Comparison	0.2	0.5	0.4	0.6	0.25	1.6	0.15	-

Source: Survey of Women Members of KRAKED

Shared reproductive roles

Family support has also made a big difference. Particularly important is that the women's families have been willing to share household tasks so that they have more time for advocacy activities. In one family, the woman's husband is even willing to help cook and wash before he goes to work.

Results: Impact of women's involvement

Increased motivation and critical awareness

After conducting the research on the impact of Aqua-Danone's operations in the area, the women became more motivated to continue and expand their roles in the advocacy process. Through the research, they saw for themselves the struggle other community members faced in obtaining water. This increased their empathy and solidarity with them. They realized that it is mostly women who have to deal with water problems every day, particularly for household needs. The experience also strengthened their ability to present strong arguments in dialogues with other advocacy stakeholders.

Increased access to community members

KRAKED's current strategic plan is to focus its primary activities on increasing awareness in the community through a socialization process. The objective is to make all stakeholders aware of the water shortage issue and to encourage them to act upon it. This process also targets local government, members of the local parliament, journalists and Aqua-Danone personnel. KRAKED asks each of its members to share their knowledge and information about the water shortages with as many people as possible. The researcher found a significant difference in how men and women participated in the information sharing process.

The surveys and interviews found that all women members shared information with their husbands, but that only 66.7 per cent of the men shared information with their wives. In general, the women appeared to be more effective in sharing information within their families and the men in sharing information outside their families.

The women also shared information with a wider informal network than the men. Given the freedom to share information in their own way, they accessed networks that would likely have been overlooked by a formal advocacy strategy. These women told their stories almost every chance they had – for example, at the religious meetings they attended. These meetings were held in various locations and sometimes had visits from other groups, thus providing wider access to diverse networks. Additionally, when a relative or neighbour was getting married, the women helping with the wedding preparations used the opportunity to disseminate the KRAKED information with other women. It is likely that these women, in turn, shared the information with other community members and particularly with their immediate families.

Increased representation of women

Initially the division of responsibility in KRAKED was not gender-balanced. Women participated only at the discussion level and were not given a decision-making role. However, the male members of KRAKED responded quite positively to women's greater participation in the advocacy programme and now feel that, since both sexes suffer the negative impact of the company's operation, women should also have the right to participate fully in the process.

The situation is changing gradually, as all members become more aware of women's empowerment issues. The women themselves recently asked to be involved in dialogues with local government and parliament. They have also asked that they be given the chance to express their concerns and have women representatives at every meeting.

Participating in the case study research also contributed to their level of awareness. During the focus group discussions, the women members realized that they could participate more and that they should have just the same opportunities as the men. Male members also said they were willing and prepared to give a bigger role to women.

More in-depth research

The focus groups also showed that the women collected more in-depth and detailed data than the men. This was the case in the calculation and review of the losses each family was facing due to water shortages, such as the extra cost of having to rent water pumps for irrigation and having to buy water from other sources for domestic use. Since women deal with day-to-day household spending and it is their role in this community to allocate monthly expenditures, they were more aware of these losses and concerns. The men tended to produce more general research results and used rhetorical phrases to describe the water shortage impact instead.

Impact on the women

Participation in the KRAKED advocacy programme has increased the women's self confidence and skills. They have learned to conduct research, share advocacy-focused information and discuss issues effectively with other members. They are also more aware of water exploitation issues and water resources issues in general. They noted that through this programme, they have learned to appreciate water better and to use it more efficiently.

The downside is that since they have been spending so much time promoting advocacy activities, their small businesses have suffered. This has led to a decrease in their incomes.

Other KRAKED members have learned that women could also take on important roles. In a recent protest, some women members gathered their courage and expressed their views and concerns. This type of participation by women was new to the other members, and they considered that it added to the protest.

Advocacy programme

To reach its objectives, KRAKED has also focused on meeting with various stakeholders (the local government, parliament and Aqua-Danone) and on mobilizing the community at strategic times such as on Farmers' Day. The stakeholders involved in this issue are starting to include KRAKED in their meetings and discussions. On 12 February 2005 Aqua-Danone's Director came to Klaten and held a dialogue with KRAKED members, together with other community members, and local government and parliamentary representatives. On 7 March 2005, KRAKED's second anniversary, the local parliament asked for a re-evaluation of Aqua-Danone's water extraction license (Tempo newspaper, 7 March 2005). The license will expire soon, and the company plans on asking for a new license with an increased extraction rate. Consequently, the re-evaluation request from parliament received a lot of publicity.

Public impact

More community members are aware of and understand the water shortage issue due to KRAKED's information-sharing methods. Their simple individual approach works well with the local community. Women's participation in this process made it more effective and facilitated KRAKED reaching a wider audience.

Conclusion

This research has identified the following lessons related to increasing women's participation in the advocacy process:

- In traditional societies, it is easier for women to become involved if they have already had some exposure to taking part in activities outside the home, if they receive support from their families for their participation in the community and if their basic needs have been addressed;

- Having access to some form of financial independence gives women more confidence to participate in advocacy activities and gains them respect from others involved in the advocacy process. This was illustrated in part by the responsibility and decision-making power given to the women concerning the allocation of KRAKED's monthly expenditures;
- Involvement in a research process can help create increased awareness and empathy among the researchers for other community members affected as well as provide additional motivation to continue advocacy efforts;
- Involving women in a community mobilization process and in information sharing greatly broadens the audience that an advocacy organization can reach;
- Changing women's roles in the advocacy process requires both active leadership on the part of the women and collaboration and support from their male colleagues;
- Women's increased participation in advocacy processes can help generate awareness of women's abilities among male colleagues; and
- Advocacy organizations can formalize a women's empowerment process by ensuring that there are female representatives at all key meetings with stakeholders and by providing leadership training for the women and gender-sensitivity training for the men.

KRAKED is a young organization and until now, decision-making has been dominated by its male members; women's participation and empowerment is also in the early stages. Nevertheless, we can learn a lot from the KRAKED experience, particularly in societies where women still come second to men. The key here is that KRAKED's male members were willing to share participation in the advocacy initiatives with women and saw the women as allies. In the process they found that both men and women benefited from increasing women's participation.

Perhaps the most important lesson we can draw from this case is that when women are given the chance, they are able to develop, learn quickly and have their own vision on how they could participate and contribute. It can also be stressed that to empower women, a specially-made programme with complex methods may not be needed. Rather, just providing the initial opportunity to participate could open many doors and can empower both women and men.

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III. PROMOTING CHANGES IN GENDER ROLES

6. TOGO: Integrating Gender into the Promotion of Hygiene in Schools

By Sena Alouka

Mr. Alouka is the Executive Director of Young Volunteers for Environment (YVE) in Togo and a member of the African Civil Society Network on Water (ANEW). He has been working on gender issues since 2001 and is a member of ANEW's women's caucus. He currently heads the biggest youth NGO in Togo and is the Coordinator of Project Wet: Water Education for Teachers (www.projectwet.org). He also served as the Coordinator for Network of Youth for Sustainable Development and as the Executive Director of the NGO, Youth United for the Protection of the Environment. Mr. Alouka has a journalism background and is a member of the National Expert Committee on Biosecurity, has taught ecology at the college level, and has served as a consultant in both sustainable development and Internet productions. He hosts a regular TV programme and formerly worked as the Programme Director for Radio Hajuna Matata.

Case study methodology: Feminist, Harvard

Problem statement

In the rural village of Effumani, 15-year-old Gentil Weleke attended the only primary school close to home. Every morning, Gentil would collect water from a distant river, then sweep the courtyard and inside her hut. Afterwards she would put a limited amount of that red-coloured water in a recycled plastic bottle to take to school. She would arrive late, but she still had to clean the teacher's office. Three times a week, she would also have to collect water from a river which was 2 kilometres away and return to class after lessons had already started. On weekends, lest she be punished, she and her girlfriends would collect water for her class and clean the headmaster's office; meanwhile her brother would play soccer.

Plan Togo, an international NGO, sought to address the lack of water and sanitation facilities in Gentil's and other villages, using a gender perspective. But the toilets did not meet everyone's needs and fell into disuse, with "girls paying the heaviest cost," as one teacher explained. Plan Togo sought support from the African-based Regional Centre for Cost-Effective Fresh Water and Sanitation (CREPA), to identify the original project's limitations and correct them in a pilot project. A lack of consultation was identified as one of the limitations.

Methodology

CREPA conducted its pilot project in three rural villages in the province of Est-Mono, 250 kilometres from Lome -- Agan, Ayona and Effufami, Gentil's village. The research for this study was done in the same three villages.

Two elements of the methodology used provided for important insights and renewed commitments to change. First, having two women in the research team enabled the few women teachers to feel comfortable enough to share their experiences. Second, the researchers shared their own experiences and advice with the villagers. Not only did local leaders and authorities appreciate their views, but in two villages they made resolutions to take future action to mainstream gender.

Background information

How Gentil used to spend her days reflects some general statistics about Togo, and the province of Est-Mono in particular. In Est-Mono, one of the 10 thirstiest zones of Togo, only 10 per cent of the population has access to potable water, in comparison to the national average of 51 per cent (Young Volunteers for the Environment, 2002). While 5 per cent of Togolese have drinking water piped into their home, 27 per cent get water from unprotected wells and 19 per cent from rivers. Only 2 per cent of the population of Est-Mono has access to sanitation at home. Men usually use nearby forests for sanitation purposes, whereas women walk to distant farms.

At the national level, 30 per cent of schools have sanitary toilets or latrines and only 26 per cent have access to water. In spite of the success of the government's 'Education for all' programme initiated in 2000, girls still represent only 43.8 per cent of students. Lack of sanitation facilities is one of the main reasons why many parents do not send their children to school.

Best practices

Given the problems identified in the original water and sanitation project for schools, CREPA ensured that all villagers participated in the design of the pilot project.

Three local coordinators stayed in the villages for six months, developed close ties with the villagers and presented the project to all the stakeholders, including women and men in the community. Their work included:

- An information kit on behavioural change used to inform stakeholders;
- Household visits;
- A high level of participation of boy and girl students, as well as men and women teachers and administrators; and
- A diagnosis of the water and sanitation available at schools to detect hygiene and sanitation problems.

Based on this input, an action plan for hygiene promotion was approved by the schools and the villages. The final project, and the shared responsibilities it entailed, were presented to the local general assemblies for their feedback and validation.

The project provided water and sanitation facilities, as well as educational resources to each village and school. They included:

- The installation of a hand-pump in each school;
- A sanitary latrine for girls;
- A hand-washing pot;
- A garbage dump;
- A plastic drinking pot for potable water for each classroom; and
- Nine colourful educational kits adapted to local conditions provided to each school.

To ensure the success and sustainability of the project, two committees were established in each village:

- The Water Committee manages the money, maintenance and repair of equipment; and

- The School Health Committee controls all the equipment and oversees hygiene.

The members of the School Health Committee are teachers and pupils selected to ensure a gender balance. The School Health Committee has implemented its mandate to bring about changes in hygiene practices. Students who are unclean are sent back home. Those who do not wash their hands are requested to do so and unclean students are reprimanded. The Food Safety Commission denies access to food sellers who come to the school with unclean water or unhygienically prepared food. The active and ongoing participation of so much of the population has considerably decreased the amount of time needed for all villagers – boys and girls, men and women – to adopt these community projects.

Results

The project has led to change in girls’ and boys education and their beliefs regarding not only water and sanitation, but also gender relations. The entire village has felt the impact.

Summary of project impact

Girls’ and Boys’ Educational Situation and Beliefs:	
Before the CREPA Pilot Project	After the CREPA Pilot Project
Boys and girls do not think about washing their hands	Hand-washing has gradually become a habit
Girls work all day long 11 out of 12 boys said they would never sweep or fetch water Girls do most of the chores at school	- Only 7 out of 29 pupils think household work is for girls and only 2 in 17 girls are still in charge of house-sweeping - More boys fetch water, bathe before school, clean the yard at home and clean the girls’ toilet
Girls are late for school	Girls are more prompt, have more time for homework and are more efficient in their assignments
Girls’ education is neglected or postponed for financial reasons or to do household work	A 171 per cent increase in girls’ attendance in Est-Mono
Girls drop out of school due to fatigue, loss of confidence, feeling inferior, and lack of privacy in toilets	Most girls have visibly overcome their shyness and are becoming self-confident
63 per cent of girls are uncomfortable with school conditions 75 per cent of boys are comfortable with school conditions	6 out of 8 students would rather stay at school than go home after class
Girls cannot bear sharing sanitation facilities with teachers and boys, so few make use of them	- Every boy now uses the toilet - Of the 66 per cent of girls who now use the toilet at school, 88 per cent use the new latrines for girls
- Half of grade 6 students do not believe girls can be leaders - 43 per cent of boys would not accept a girl leader (prefect)	- 74 per cent of girls proudly declare they can serve as class prefect or leader - Girls are glad to have their voices heard on the various committees
75 per cent of girls are unhappy with how they are treated	- Girls denounce gender imbalances at school: running errands for teachers, sexual

<p>The official curriculum depicts boys in important positions and girls in inferior ones Boys spy on girls in the latrine</p>	<p>harassment, girls getting insulted by boys when they get the highest mark - 87 per cent of girls recognized a noteworthy change in boys' attitudes. - Both boys and girls seem to be more comfortable in mixed gender groups than in boy-only or girl-only groups</p>
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Other changes at school

Teachers appreciate the changes in their students, which has made teaching more gratifying and has, in turn, affected their own behaviour with regard to hygiene. In fact 88 per cent of students noticed these changes in teachers' behaviour. Such changes made the teachers:

- Feel more at ease when pupils are clean;
- Feel less stress because they are no longer responsible for students who have to go out in the bush to collect water;
- Appreciate the new mutual respect between girls and boys as this generates more respect for the school rules;
- Understand some gender-based imbalances; and
- Have also made changes to their hygiene, such as systematically covering their water.

Each of the villages has built a headmaster's house for each school, so that they can supervise the water and sanitation equipment on their own.

In Agan a historical 15 pupils went on to secondary school as a result of having extra time to do homework.

Income generation for the school

By selling water, which is considered to be sacred by the villagers, not only are the schools now endowed with the status of nurturing life, they are also generating income. The three Water Committees have already saved 182,000 F CFA (about US\$ 330).

Impact on health

- As a result of the training provided to educate the villagers, people now understand that the source of many diseases is unclean water and inappropriate sanitation;
- Students are absent less often due to illness;
- Fewer pupils go to hospital for diarrhoea and other minor infections;
- Parents notice a significant decrease in typhoid and other fevers.

Impact on sanitation

- A local sanitation controller was appointed;
- Waste material is systematically sent to the villages' newly established garbage dump;
- Villages look cleaner; and
- Some old pumps have been repaired.

Impact for women villagers

- Women now have more time to dedicate to income-generating activities.
- Women now want to organize public debates to address:
 - Social imbalances related to their participation in various committees;
 - Domestic violence; and
 - Stereotypes.

Impact on the communities

- New habits at home for transporting and storing water using bleach and plastic cans;
- Cleaner homes;
- Parents have good discussions with their children;
- Many people can identify sources of gender imbalances; and
- Stronger social ties among the four ethnic communities of Agan.

Lessons learned by donors

CREPA and Plan Togo:

- Increased their understanding of gender mainstreaming;
- Developed expertise in implementing package projects, instead of single-issue ones;
- Signed contracts for similar projects in other areas of Togo; and
- Believe that gender mainstreaming contributes to the success of any project.

Life stories

Adam Kombate, a 12-year-old boy student and member of the School Health Committee:

“With the new equipment, we no longer bring water from home to school. I thoroughly wash myself after every sport. I can recall how I used to practically jump at food at home. Now I always wash my hands and take the opportunity to discuss hygiene issues with my mother. I take my time to have a good bath. In the past, we urinated everywhere like dogs, but now we have a clean urinal at school. Yet when we return home there are no sanitation facilities, so we go back to our old habits.”

Gentil Weleke, a 15-year-old girl student and member of the School Health Committee:

“Becoming a member of the School Health Committee – the hygiene police – has changed my personality. Now, I wash my hands every time before I eat. I cover my food once I have finished cooking. I am trying to help my friends to do the same. The training we received helps me to oversee the food brought to school by women villagers. I advise them to cover their table, the water and the food. Without my consent, no one eats. One day, I sent a seller away who wrapped her food in unhealthy leaves. I threw the leaves away and gave her the appropriate paper. Since then, she always comes with good paper. I also succeeded in convincing my parents to always wash their hands. I have made new boy and girl friends.”

Lessons learned

As a result of this project these villages have provided potable water and clean and sex-specific sanitation facilities at schools, girls’ attendance rate at school has increased, and more boys are contributing to housework.

Addressing gender imbalances among students and ensuring the participation of the entire community has led to impacts far beyond the immediate results. These are:

- Greater mutual respect among boys and girls, girls have increased their self-esteem and they are respected as leaders;

- More students are continuing to secondary education;
- Schools are selling the water to their communities and saving money;
- Teachers, parents, food sellers, community leaders and other villagers have changed their behaviour to adopt hygienic practices with water, food, and waste; and
- The health of the community, especially school-attending children, has improved.

Community leaders and donors recognize the need to address both gender issues and water and sanitation issues hand-in-hand:

- The water and sanitation problems at school were adequately dealt with once some of the gender imbalances were addressed.

These successes have prompted demands for even greater change in the three communities such as:

- Children are critical of their parents if they have unclean water or unsanitary practices;
- Girls criticize sexism at school, for example in the curriculum; and
- Women leaders want to address domestic violence and other gender imbalances in the communities.

Transferability and Sustainability:

- Plan Togo will introduce a family latrine project in the same three villages;
- Plan Togo will establish School Health Committees in 20 schools in other villages where it had only constructed water and sanitation facilities; and
- CREPA is setting up a national network of organizations involved in gender mainstreaming so they can share their experiences.

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Acknowledgements

The author would like to thank Tchilalo Ayelou and Kristin Magnun, two volunteers with the Young Volunteers for Environment, who also contributed to the research process at the community level. Their assistance and participation was greatly appreciated.

IV. COMMUNITY PARTICIPATION IN RESOURCE MANAGEMENT

7. GUATEMALA: Meeting Women's and Men's Water Needs in the "El Naranjo" River Watershed Organization

By Leontine van den Hooven

Ms. van den Hooven, originally from the Netherlands, is a permanent resident of Guatemala. She has training in social welfare and holds a Master's degree in Policies, Cultural Issues and Gender. She currently specializes in gender, water and energy issues as the Gender and Diversity Adviser for the Fundación Solar, an organization based in Guatemala. Ms. van den Hooven has held several advisory positions prior to her work at the Fundación Solar, including: Project Adviser, supervising group projects in the Netherlands; International Adviser, evaluating and developing proposals for communal banks; and Poverty, Gender and Energy Adviser for the UNDP in Guatemala. Other previous employment includes a volunteer position working with returned refugees in Guatemala.

Case study methodology: Appreciative inquiry, feminist analysis

Problem statement

Where there used to be plentiful and clean water, the upper watershed of the El Naranjo River now has scarce and polluted water. With a population of about 152,000, the communities that depend on the river for water have a variety of different, and at times conflicting, water needs that vary between men and women and urban and rural communities.

In order for men and women from the communities to improve their access to and control of water, they need to be organized so they can manage funds for productive community and environmental projects, and advocate for their needs in municipal decision-making. An essential part of this process is for women to be equal participants with men in defining and representing the community's interests.

Methodology

The research for this case study was carried out predominantly with members of two community associations, using focus groups, open-ended interviews and direct observation. These methods were supplemented with interviews with the president of the association of municipalities and two consultants from the NGO Fundación Solar, as well as a review of project documents. The research specifically addressed the short- and long-term water needs of men and women in the communities as well as women's participation in the organizations.

Background

The watershed of the El Naranjo River is located between the departments of San Marcos and Quetzaltenango. There is a great deal of pressure on natural resources, especially water, because of the many uses of such resources and the various needs of the communities. The greatest need is for potable water through a distribution network, as a few of the communities no longer even have access to water. Urban residents require the network for domestic water supply and for drainage, whereas rural residents need water for soils and forests. Furthermore, large corporations use a tremendous amount of water and leave the river polluted.

Men use water mostly for their animals, irrigation and construction. Women need water for domestic tasks such as cooking, cleaning and washing, and they spend a lot of time and effort every two days to haul the water they need.

These various needs have generated conflicts which go beyond local institutional capacity as well as traditional dispute-settling mechanisms. They have raised many questions for local authorities and leaders regarding current legal regulations and their application to the administration of water resources.

The Fundación Solar is a private development organization in Guatemala that promotes social capacity building among all stakeholders for the integrated and sustainable management of renewable natural resources. In its model, women are equal participants in gender-mainstreamed and participatory methods that enhance equity and efficiency in the management of water resources.

In 2002, the Fundación Solar started a three-year project in the area with the support of NOVIB (Oxfam Netherlands) to promote social peace through the construction of a more sustainable resource-community relationship. It is supported through several international and local NGOs and focuses on the rights and obligations of users, service providers and local public authorities. The project works by researching trends in water use, training municipal authorities and grassroots leaders, and supporting social planning and organization processes, so that local leaders and authorities will develop and execute joint plans for sustainable management to meet the communities' needs.

The programme

Organizing the communities

The Fundación Solar began by meeting with the mayors of the communities. The plan was to set up both an urban and a rural community association to represent their different needs.

At first it was not easy to bring people together. Many people did not have much confidence in trying to negotiate with people who have different water needs. Furthermore, most of the people are poor and more interested in projects of infrastructure than projects of social organization and sensitisation. Thus, a public information and education campaign was launched about the watershed in the local language and information was spread via radio, posters, public forums and vehicles with loudspeakers.

The first task of the two new associations was to design municipal water policies. Members attended municipal council meetings and presented their proposals, which were approved by the council. Other municipalities became interested in the project, and eight more associations were formed; these new associations also advocated for water policies.

In the rural areas, people found this way of organizing to be complicated because of their more vulnerable living conditions. A more integrated system of planning was needed, one that took into account the basic needs of everyone. In this way, not only was water discussed, but also other basic issues, such as income-generating projects.

Gender sensitization and training lead to women's active participation

To overcome the differences within each association and among all the associations, sensitization and training sessions were held. The topics of the sessions included water shortage and

contamination, the need for a distribution network and the different uses for water in the household, the fields and in construction work.

Gender equality was also addressed with women and men, both in the context of each gender's different water needs and other non-resource-related issues that were seen as challenges to gender equality in the communities. The course even dealt with domestic violence and the need for men to take responsibility for their actions. The course was repeated with all 10 associations at the beginning of the third year of the project. The topics were of great interest to the women and they usually made the men more aware of the difficult situation women face.

The members of the associations realized how important water is for women as the primary users of the resource. Therefore, the members decided that both men and women needed to participate actively in the organization process, because the projects would be of great importance for the entire community. Many husbands started encouraging their wives to participate and to speak up about their water needs and problems.

The women noticed that when they told their stories, their opinions were taken into account. That encouraged them to participate in the decision-making process. Now, women are less fearful about public speaking, and people pay more attention to them. There are several women leaders participating in the process. This gives other women greater confidence to talk about their own water problems and needs.

The community associations become legal entities

It was decided that the associations should be formalized and receive official legal status. In turn, the project grew from a short-term initiative into a long-term presence in the community. Their legal status also enabled the associations to operate more effectively and have a greater impact on the municipalities and water policies.

A new law concerning development councils allows such organizations to manage funds once they have become legal associations. Now the associations will be able to receive support in the form of donations, which will help maintain the organization and address other basic needs of their members.

In July 2002 the new municipal code introduced the association of municipalities as a new legal entity, in addition to the community associations that had already been granted legal status. The first association of municipalities for the integrated management of water resources was legalized as a result of this project, to provide a forum where both urban and rural associations could meet to discuss the integrated management of water resources.

The two groups – the association of municipalities and the community associations – are taking joint action to define strategy and future projects in regards to water policy. They are looking for a new, joint organizational structure so they can work together to achieve peace through the water resources.

Results

Joining together under a single objective

Members of the associations observed that their community has changed because of the project and the organization of the associations. Before, people worked independently and looked after their own interests. They fought over the water resource. Now, 10 legal associations have been organized with over 74,000 men and close to 78,000 women beneficiaries. They meet weekly,

and no longer rely on the participation of project consultants from the Fundación Solar. The associations are devoted to promoting social strategies to improve integrated water resource management. In interviews with 29 male and 30 female community association members from both the urban and rural associations (there were 70 members in total in these two associations), men and women expressed their satisfaction with the process, although they acknowledged that more work is still required.

Training, sensitization and men's and women's participation

The project provided training and sensitization sessions to many members in the communities. In these sessions, people expressed their interest in the training and organizational processes that formed the project. Workshop topics included caring for the environment and the watershed, reforestation, gender equity, conflict resolution and organizational skills. Now, people are much more open to the ideas, problems and needs of others.

These changes are visible within families. In the beginning, most of the members of the associations were men. But through the sensitization activities, they began to look at water problems in a new way, so many husbands encouraged their wives to participate. During these meetings, for the first time in their lives, many women had the opportunity to express in public their problems related to water. Participants paid attention to these women, and their needs were taken into account in organizing and advocacy.

Now, 51 per cent of the members of the community associations are women. Several women are also on the board of directors. These individuals set an example for other women in their communities.

Advocacy in water policy

Water problems and needs still exist, but now people are more organized and thus more prepared to deal with these issues. The associations are incorporated and they are working on developing municipal water policies. They also participate in the meetings of the association of municipalities of the El Naranjo river watershed. As a result of their advocacy work, the water problems of rural and isolated communities are now being taken into greater account by the municipalities.

Income generation

The associations now have some funds, which they are using for small environmental and community projects, such as a greenhouse with rainwater-fed pepper plants in which women have control over the income generated. These small projects provide resources to invest in other projects, which enable the associations to meet the needs of more people.

Life stories

Yolanda Pérez Ramírez

“We learned a lot from this project. We received training on working in an association, income-generating projects and the environment. Now we have a greenhouse where peppers grow with rainwater. This gives us income. We also learned how to use the water in an efficient way. Furthermore, we learned that we have to reforest when we remove trees, so we will continue receiving enough water to live.

“For women, this has been a very important experience, because it was the first time that we were included in an organizational process. We have found that people are listening to

our problems. The greenhouse is also very important, because we were taken into account during the construction process and we control the income. This has given us a lot of experience and others like to hear about it.”

Mario Orozco López

“We live here, where the river begins. I remember that in the past we travelled to the Pacific coast, where the river ends. The river was always a beauty, but now it is very polluted. On the coast – the lower part – the river is so dirty, and that saddens me. We did not see that before, but now we are more aware of the situation because of the training we received. Now we know that we all have to work together, men and women, in the upper, middle and lower parts of the river, to clean it. Only in this way will we learn about the water needs and problems of men and women in other parts of the river and all live in peace.”

Conclusion

The following lists of best practices in both gender mainstreaming and participatory processes indicate how the communities of the upper watershed of the El Naranjo River are organizing together – men and women, urban and rural, civil society and municipalities – to find peaceful means to meet their different needs through the water resource.

Best practices

Gender Mainstreaming

- Both men and women responded to the water issue;
- Different water needs of men and women were taken into account;
- Community members learned that women use more water than men, and thus deserved a say in the project;
- Women actively participated in the organization and decision-making processes;
- Women participated in creating income-generating projects for the community and the environment;
- Women were given control of the income from the projects and were thus empowered; and
- Men are now aware of the difficult situation faced by women.

Participatory Process

- Urban and rural community associations were organized;
- Various rural and urban water needs were taken into account;
- Civil society designed municipal water policies;
- Municipal councils adopted and approved those municipal water policies;
- Weekly meetings of community associations were held without the participation of an NGO;
- The first association of municipalities was formed for the integrated management of water resources in Guatemala; and
- Joint actions were taken by the municipalities and civil society regarding water resources.

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8. ZIMBABWE: Gender Mainstreaming Best Practices in Water Supply and Sanitation in Manzvire Village, Chipinge District

By Luckson Katsi

Mr. Katsi is a social scientist with a background in the environment. He studied Geography and Environmental Studies at Midlands State University, Zimbabwe. He also holds a Post Graduate Diploma in Water Supply and Sanitation and has attended and presented papers at a number of regional and international conferences and workshops. His main areas of interest are: gender and development; rural water supply and sanitation; integrated water resources management; environmental law; and environmental impact assessment. He worked as a Research Assistant at the Institute of Water and Sanitation Development, Harare, where much of his time was spent in rural areas, working on a project which examined the policy implications of the contamination of rural water supplies between the source and point of use. Mr. Katsi is currently studying for a master's degree in Integrated Water Resources Management at the University of Zimbabwe.

Case study methodology: Appreciative inquiry, feminist analysis

Gender analysis tool: Empowerment framework

Problem statement

Following Zimbabwe's independence in 1980, provision of water supply and sanitation was supply-driven. Later, in recognition of the huge costs to society of poor health as a direct result of unreliable water supply and inadequate sanitation, especially in rural areas, the government implemented a strategy to decentralize services to local governments. In the early 1990s, Zimbabwe launched programmes for Community-based Management (CBM) and Integrated Rural Water Supply and Sanitation.

The country embarked on a water sector reform in 1993 and promulgated the New Water Act in 1998, which together with the Zimbabwe National Water Act, fundamentally changed water resources management in Zimbabwe. Women's participation in project activities was encouraged in line with global trends and given the critical links between gender, water and sanitation.

Under the CBM programme, pilot projects were carried out in Chivi district. These were extended to districts nationwide in 1994-97. In 1997, CBM projects were documented and the working principles for the management programme were introduced.

In line with government strategies, Chipinge district adopted a CBM approach to water resource management in 1997, and introduced it to some of its wards, including Ward 22 in Manzvire. This represented a significant shift from a situation where the communities used to be recipients of development to one where they are also part and parcel of any development with gender mainstreaming as an integral part of the shift.

Methodology

The researcher conducted interviews and held discussions using an appreciative inquiry approach to investigate the best practices related to gender mainstreaming in the water and sanitation sector in Manzvire village. This involved holding discussions with project stakeholders including UNICEF personnel, the Chipinge Rural District Council (RDC), and members of the Community and District Water Supply and Sanitation Sub-Committee. Focus group discussions revealed that

women had previously been marginalized. These discussions also revealed how women felt about their involvement in all development areas in their locality. During these focus group discussions, both men and women lamented that in the past their problems were mainly a result of the design of the water supply systems, which failed to consider their multiple needs for water. Apart from safe water for domestic uses, people in Manzvire expressed a need for water for their gardens and for brewing beer and making bricks, all of which can bring income to the household.

The interviews and discussions were augmented by individual talks with water point committee members and young women to help gain an understanding of the norms and perceptions related to the separate roles and responsibilities of men and women as well as those that are shared by both. A feminist approach was used to examine the patriarchal and andocentric power structures in the village; the empowerment framework was employed to assess changes in these power structures from different perspectives. Communities were able to indicate the allocation of tasks within their families. Men were also able to indicate in which areas they could share responsibilities to ensure that their women counterparts were not over-burdened by community activities in addition to their productive and reproductive duties. For example, men indicated that they could help women through digging toilet pits and transporting pit sand for toilet construction from Save River, which is about 15 kilometres away. However, there were no significant differences in the roles of men and women who were heads of households. Women who headed households demonstrated their active involvement in commercial uses of water, including for livestock, brick making and traditional beer brewing, among other income generating activities.

Background information

Chipinge is located in Manicaland province in south-eastern Zimbabwe on the border with Mozambique. The Chipinge RDC started various water supply and sanitation projects in 1985. The members of the District Water Supply and Sanitation Sub-Committee consist of: the Environmental Health Technician from the Ministry of Health and Child Welfare; the District Development Fund officer; the representative of the Department of Natural Resources; and the Agricultural Research and Extension Services officer. Manzvire Village is in Ward 22 in Chipinge District and under the administration of the Chipinge RDC. Ward 22 receives an annual rainfall of approximately 450 millimeters and is located in a plain area where soils are generally sandy. Although ephemeral streams occur here and there, there is no year-round supply of surface water.

Manzvire village has a population of approximately 5,500, with 514 households, the majority of which are *ndau*-speaking people. According to Mrs. Mabuyana, an active Village Committee worker, about 289 households have access to individual 'Blair' toilets (Ventilated Improved Pit latrines) and 180 have access to pit latrines. At least 45 households were said to have no access to any form of decent sanitation, but were allowed temporary access to their neighbours' facilities. There is no surface water in this village except for the Save River, approximately 15 kilometres away. People use boreholes and shallow wells as water supply sources. The village has 10 boreholes, eight of which were reported to be functional at the time of this study. It also has four primary schools, one secondary school, two clinics and the Manzvire business centre. In Manzvire, HIV/AIDS and rural/urban migration are primary contributors to at least 80 per cent of the households being female or orphan-headed.

Best practices

In 2003, the United Nations Children's Fund (UNICEF) contributed approximately US\$ 4,000 to the Chipinge RDC for the rehabilitation of water supply systems, mainly boreholes. Given high external contracting costs, the RDC adopted a community-based programming approach and targeted funds for community mobilization, training workshops, and the training of local well sinkers and headwork builders. To strengthen the capacity of personnel at district level to support communities in their water supply and sanitation endeavors, the Head of the Community Services Section had attended refresher courses at the Institute of Water and Sanitation Development. At the time of this study, the Chief Executive Officer for the Chipinge RDC indicated that plans were underway to assist others to benefit from such courses.

Women in Manzvire were identified as the key beneficiaries to receive training in water system operations and maintenance, since many of the men who had received community training earlier had left the village to take up better paying jobs or spent too much time drinking. As a result, women suffered most in times of water shortages due to breakdowns of the boreholes.

After receiving funding in 2003, the Rural District Council, with the assistance of UNICEF personnel, started training the village people to take charge of their own water supply systems. According to one of the UNICEF staff, this training revived CBM, which, due to lack of funds, had ceased to function. During the first days of training, in the male-headed households, the husbands felt threatened and disapproved their wives' involvement in project meetings. UNICEF held an awareness-raising workshop in Manzvire, outlining the benefits of training both men and women, which helped the men begin to accept and realize that their wives were equally important agents of change. Women were subsequently trained to ensure prompt repairs and proper maintenance of boreholes. They also received skills training in latrine building, pump maintenance and tools, and took on the role of mobilizing other communities. Despite the fact that these were non-traditional roles for women, it was apparent that the men in the community accepted this change, as they demonstrated a keen interest in assisting with other household tasks while their wives were attending related community meetings and training. They ensured that children, gardens and the family's domestic animals, among other 'female-perceived tasks,' were well looked after.

Initially, the long traditional dress for Zimbabwean women inhibited work for the latrine builders; overalls and work-suits were considered inappropriate. However, women can now freely wear work suits and overalls during latrine construction and repairing of boreholes.

Planning and selecting appropriate technology and sites for new water points, as well as upgrading and rehabilitating existing systems, are jobs that are increasingly based on both men's and women's participation. In Manzvire in particular, the women select the technology to be used as well as the site locations. An elder remarked, "It is the women who spend much of the time with this resource and we saw it fit for them to have a bigger share when it comes to decisions."

Once the women were able to become involved and found that they had increased power, however, their workload increased significantly. They still had to carry out their traditional reproductive and productive work, and now were also working on latrines and boreholes and other components of the project, while the men continued to spend considerable time drinking. After repeated community meetings and awareness campaigns with UNICEF and the RDC, men finally agreed to help decrease the women's extra burden by taking on responsibility for protecting water points from animals by fencing and putting cement around some deep wells; they also became involved in other domestic chores.

At the household level, women dealt with the workload by devising a collective roster in which they assigned water and sanitation duties and tasks to each household for designated water points. This included regular cleaning and clearing of open drains to curb water logging and to discourage mosquito breeding.

The women also established savings and credit clubs (some with male members) with revolving funds to buy the locally available spare parts and greasing materials. In Manzvire, women established a cooperative garden. Initially each household made a monthly contribution from the sales of their vegetables and other produce from this garden. Husbands were also asked to make contributions to the fund when required. The women opened a Post Office Savings Bank account to deposit these community funds.

Much of the success of the community-based approach can be attributed to effective leadership of their dedicated councillor, Mrs. Chirimambowa, who also sits on various boards and is held in respect in the village. Her husband is a headmaster and is very supportive. They could also call upon traditional leaders to solve disputes if members did not meet their obligations to the group. The power of traditional leaders, *mutape*, is well respected in this village.

The Ministry of Health was also instrumental in training health educators, the Village Health Workers, who had the tremendous task of disseminating education and information to the general public on health and hygiene good practices. In Manzvire, this has resulted in the formation of health clubs and other community-led initiatives. Although the Village Health Workers have done a lot in this village, they lamented that their monthly allowances have not been reviewed for the past years. In fact, they considered themselves ‘voluntary workers’ because their monthly allowances were very paltry.

“At times, the allowances do not even come on time. We cannot bank on this pay because it is very little and we cannot even travel to the district offices to collect the money because the bus fare we use is even higher than our monthly allowances.” – Village Health Worker

“Although UNICEF had been instrumental in providing financial and technical support in the beginning, we strongly emphasized the building of local partnerships and local initiatives,” said Nicholas Moyo, UNICEF Assistant Health Programme Officer. He explained that the credit should go to the RDC for effective community leadership. “We operate in various districts, but the impact in this district, particularly in Ward 22, is quite encouraging,” he added.

Effective collaboration and coordination between Manzvire village and the council’s water division, as well as with UNICEF, have played a significant role in the project’s success.

Results

Improved water and sanitation represent much more than health. They offer substantial benefits, especially to women who save time spent carrying water (Sandy Cairncross et al, 2003:3). The community-based management programme in *Chipinge* achieved outcomes to the benefit of the community on many different levels.

Women's empowerment

- Women's contributions were recognized and their role as custodians and managers of water resources into the decision-making processes of Ward 22 was strengthened;
- Women's self-confidence has increased;
- Women have taken on what were traditionally considered male activities, such as pump maintenance, latrine builders and pump mechanics; and
- Women are actively involved in decision-making and now strongly feel that they are equally effective agents of change.

Effectiveness and efficiency

- Due to their newly acquired knowledge and skills, the women village pump mechanics and pump minders are now able to repair and rehabilitate the community hand pumps themselves in a timely way, something that did not happen when this was solely men's responsibility; and
- Since the women's maintenance work is done on a voluntary basis, the work now also costs significantly less.

Increased coverage

- The financial resources provided by UNICEF were targeted to rehabilitate 15 boreholes. Women's participation in borehole operation and maintenance meant that it was possible to rehabilitate 60 boreholes.

Impact of increased time

- Water sources are now located strategically to cater for all households within a walking distance of about 800 metres or less, saving the women considerable time each day;
- Women have increased time for other productive activities such as market gardening, which gives them cash and improves their nutritional base;
- With their husbands, they also eke out a living moulding bricks, with part of these earnings used to pay school fees for their children; and
- Women have increased time to train in other income generating ventures such as tie dye production and the forging of ploughs and other farming equipment.

“We no longer have the daily burden of walking about eight kilometres to get water. We can now devote much of this time to our families and other productive activities such as gardening, which forms our daily livelihoods.” – Water Point Committee member

Community development

- The use of the Community-based Management approach has reduced the community's dependency syndrome;
- Women charge interest of 30 per cent on loans from the savings and credit clubs and use the interest to:
 - Replace leather cups for boreholes in their village;
 - Send their children to school; and
 - Stock up on non-perishable groceries for use during festive seasons;
- The village has formed burial societies, school development committees and many other joint venture projects;
- The skills and knowledge acquired in building women's capacity to manage their own water supply systems stimulated further community-led development. With the Ministry of Health and Child Welfare, village groups were trained as ward care supporters. Their

- role is to collect information on health-related issues from households, to support home-based AIDS groups, and help nursing village AIDS patients; and
- The women were given cement by Red Cross to build their own latrines. With the help of their husbands, they dug pits and used part of the money from their savings club to hire trained builders from within their village to construct latrines.

Better hygiene

- Access to a convenient water supply led to the formation of health clubs, which in turn led to a community-initiated sanitary facility project and significant changes in hygiene behaviour. At least 450 households now have pot-racks for putting dishes and pots to dry after cleaning and about 430 households have rubbish pits.

Improved health

- The microbiological quality of water in Manzvire shows that the water was generally safe for human consumption. According to the Principal Environmental Health Technician, about 85 of the tested water samples were found to be within the WHO drinking water quality guidelines.
- There was a significant decrease of diarrhoeal disease in the village. Records kept at Manzvire clinic indicated that fewer reported cases of diarrhea were an indication of improved hygiene. However, there was still a high prevalence of malaria cases.

Role modelling

- In late 2004, UNICEF prepared a documentary on the CBM programming and gender mainstreaming approach used in Ward 22 that they will use to train other communities within Zimbabwe and beyond. The video focuses on how in Manzvire, both women and men have been empowered to identify, analyze and find alternatives to their own local problems.
- 16 community members were sponsored to attend a regional Water Resources, Sanitation and Hygiene (WARSH) Fair held in Harare in September 2004 to share their best practices with other communities. They did this through drama and discussions with people from all walks of life, encouraging other communities to emulate them.

Conclusion

Gender mainstreaming in water supply and sanitation is a relatively new concept, which seeks to take into account the needs and interests of both men and women in water and sanitation management. In this context, it is important to understand gender roles and responsibilities within a given cultural setting. Gender mainstreaming is a process which advances women's abilities to influence decisions in their communities, while recognizing men's valuable contributions and roles.

The key lessons from the Ward 22 case are that the gender mainstreaming approach was an important success factor for the project's contributions to improved health, girls' education, improved hygiene practices, community development and women's ability to make decisions related to technology and site selection, among others. However, it is also important to note that gender mainstreaming alone is not a panacea for solving water and sanitation problems. Poverty is an ongoing challenge that carries with it limited access to improved water supply and sanitation, especially for African women.

In addition, initiatives aimed at empowering women in the water and sanitation sector need to ensure that the labour involved in community-based management is divided more evenly between men and women. In many villages, women play multiple roles in water utilisation. Rural women are often daily water carriers, users, managers and custodians of household water and hygiene. In these efforts, women should not wind up with even heavier workloads that offset the benefits of the improved water and sanitation facilities.

For gender mainstreaming to be effective, there is a need to invest heavily in capacity building at village, district and national levels. There is also need for an institutional set-up to spearhead and assist with the research, documentation and distribution of findings on gender mainstreaming for implementation.

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Acknowledgements

The researcher is grateful for all the assistance and the encouragement he received. Special thanks go to: Chipinge Rural District Council and the Manzvire community; UNICEF (Harare); Wariara Mbugua and her team (DESA/OSAGI, New York); Dana Peebles and Nadine Jubb (Kartini International, Canada), Veronica (UNECA, Addis Ababa); UNDP (Harare), Joyce Njigua (Kenya) for all her efforts into this study, Zainab Birungi (Uganda), Ndokosho Johnson (Namibia);Thobekile (South Africa), Mmiso (Swaziland), Agostinho Vilanculous (Mozambique), Tendai Demberere, Sherman Mutengu, Chiunda Cressida (IWRM, University of Zimbabwe, 2005); My family and friends: Colleta, Jacob, Lloyd, Lovemore, Lawrence, Leopold, Liberty, Evelyn Bwazvo and Tawanda Musina. Thank you so much for your efforts, criticism and patience. Without you, this could not have been possible. God bless you all!

9. BANGLADESH: Gender Mainstreaming Processes in Community-based Flood Risk Management

By S.H.M. Fakhruddin

Mr. Fakhruddin plans water sector-related projects for the Centre for Environment and Geographic Information Services (CEGIS), a trust established under the Bangladesh Ministry of Water Resources. He has experience in environmental issues, land and water resource problems, integrated water resources, disaster risk management and flood monitoring using Radar Satellite Imagery. He is an expert in using Geographic Information Services for spatial planning in water resources and for floodplain hydrological and catchment delineation studies. He has also been involved in numerous projects, including those related to climate scenario development, urban water and sanitation and gender mainstreaming in integrated water resources management. Mr. Fakhruddin has designed and coordinated gender mainstreaming and community development projects related to climate and disaster risk management and has worked with communities living with disasters in South Asia. He has provided technical support to a diverse range of national and international projects and organizations, and has a number of publications to his credit.

Case study methodology: Harvard

Problem statement

In Bangladesh, household and community responses to extreme recurring events such as floods are an indicator of the extent of their vulnerability, their level of capacity to cope with the event and the intensity of the hazard. The better informed people are ahead of time, the better they can prepare for the hazard and reduce the risk of damage in their community. Flood preparedness is to a large extent dependent on two elements: first, the ability of relevant national, local and community institutions to provide communication; and second, determining and prioritizing the content of communications on the basis of user needs and priorities. The lead time of the traditional hydrologic forecasts is very short, and local people do not understand danger-level terminology. There is no mechanism to relate forecast information to user needs at specific locations.

Men and women have different capacities and vulnerabilities in regards to information dissemination due to their different roles and conditions. Therefore, they are affected by disaster differently. In many contexts, men are better connected to early warning mechanisms due to their movement in public spaces and access to various channels of communication, such as radio and TV, informal community networks and interaction with officials. Women have limited access to information and knowledge related to disaster risks in their communities, as they spend more time in the home, have less mobility in the community and understand hazards less. Women's voices regarding risk reduction are barely heard in policy and decision-making processes.

Methodology

A gender analysis framework was developed to study various community-wide patterns related to disasters that could be analysed in the context of gender. These included traditional gender roles, access to and control of means of communication and other resources and impacts of the disaster that differed by gender, before, during and after the event. A Harvard analytical framework and an access and control framework were used to make women's roles visible in risk management.

Research was conducted using semi-structured questionnaires as well as holding interviews, workshops and focus groups with men and women from the community. Of the respondents, at least 50 per cent were female.

The study area is situated in a flood-prone zone along the left bank of the Jamuna River covering Daulatpur Thana (sub-district) in Manikganj District and part of Nagarpur Thana of Tangail District of Bangladesh. The total study area is about 300 square kilometres. The project area is bound by the Jamuna River on the west and the Dhaleswari River on the east (see map).

Background information

In Bangladesh, people living in flood-prone areas face floods and disasters with coping mechanisms and survival techniques developed through traditional practices and family wisdom. Every year before the monsoon, most of these resourceful people raise the foundation (or the *plinth*) of their houses. A small number of people plant trees to protect their houses from wave erosion. It is a very common practice for village women to make movable earthen cooking stoves and preserve fuel materials in them for cooking during floods. If forewarned about location, duration and recession time, people can benefit from floods, particularly because of rich soil deposited for the coming year's crop cultivation.

During and after disasters, communities are the first to respond to the situation. Earlier studies and literature stress the importance of communities having sufficient time and appropriate information to respond before, during and after floods. Well-informed communities can substantially reduce risks and losses and increase their resilience to adapt.

In Bangladesh, rural women, who are mainly engaged in a variety of domestic chores and activities, are affected in different, usually negative, ways by floods. Easily understandable seasonal and monthly predictions would help village women to save money for crisis periods and to make decisions regarding alternative sources of income or timely migration to alleviate the possible interruption of their livelihoods.

In early 2004, the Centre for Environmental and Geographic Information Services (CEGIS), together with other national agencies, took the initiative to implement a project on flood vulnerability, risk reduction and better preparedness through a community-based information system in a flood-prone zone. It included an analysis of the impact of gender mainstreaming on the flood-risk programme in relation to reduced vulnerability and risk. The objective was to identify best practices regarding flood preparedness, information dissemination, especially to women at home, and vulnerability and risk reduction.

The process began by organizing a sensitization meeting at a local government institute with the participation of NGOs and the Disaster Mitigation Group (DMI), a local government institution, to identify men's and women's needs. Research was carried out using interviews, questionnaires, focus groups and open-ended discussions to identify their specific needs. The process was pre-tested in the field and then implemented.

Best practices

Identifying gender roles and differential gender impacts

At the beginning of the project, a base-line household survey was conducted by CEGIS together with Riverside Technology Inc. (RTI) and Bangladesh Disaster Preparedness Centre (BDPC) to assess flood vulnerability, risk reduction and better preparedness through a community-based information system, which included a gender-mainstreaming approach. There was a 98 per cent response rate for the survey. Qualitative research was done to identify gender roles for men and women in the family and community before, during and after floods (refer to figure 1).

Gender Roles	Before Flood		During Flood		After Flood	
	Women	Men	Women	Men	Women	Men
Ensuring food availability	✓		✓	✓	✓	
Care for Children	✓		✓	✓	✓	
Collect water	✓		✓	✓	✓	
Collect fuel	✓		✓		✓	
Go to market	✓		✓	✓	✓	
Clean house and wash clothes	✓				✓	
Take care of sick	✓		✓		✓	
Give health education	✓		✓		✓	
Repair house	✓	✓		✓	✓	✓
Attend community meeting		✓				✓
Draw evacuation plans		✓		✓		✓
Receive warning		✓		✓		✓
Evacuate families and others		✓	✓	✓		✓
Guard house	✓		✓	✓		
Get capital for small business			✓			

Figure 1. Activity profile of men and women before, during and after a flood

It was found that floods have less of an impact on men than on women in regards to food, nutrition, health, sanitation and resources, as men control resources and can leave their homes and communities to look for work. Additionally, women are responsible not only for ensuring food for themselves, but also for their children. Sanitation is also a greater problem for women; in a flood disaster area, they have to wait until dark to defecate or urinate, which can lead to disease. Thus coping with floods is more of a challenge for women than men (refer to figure 2).

An important finding of the needs assessment was that all of the men and women in the survey revealed that they could not relate to the forecasts as they were not adapted to their local situation. Either the language and the metric system were alien to their culture or the information provided about the river water was not helpful on the flood plain.

Flood Impacts	Men	Women
Food and Nutrition		
Food insecurity	+	+++
Less food supply	+	+++
Less consumption		+++
Less calorie		+++
Health, Sanitation		
Diseases	++	+++
Cholera	++	+++
Diarrhoea	++	+++
No Medical Services	+	+++
Psychological Suffering	+	++
Physical Suffering	+	+++
No Sanitation		+++
Skin diseases	++	+++
Resource and Others		
No Land	+	++
No Money	++	++
Sell Property		++
Low Paid		+++
Insecurity		+++
No Protection		+++

Figure 2. Flood impacts on men and women

The study also found important differences between men's and women's abilities to access information. Women receive very little information in comparison to men before and during floods, as they are likely to be busy taking care of children, collecting drinking water, and preserving seeds, fuel, food and cash. Men receive warning information as they have interpersonal communication with others. They have access to radios and TV, as well as other means of communication, as they are free to move around in the community and beyond. In addition, the study revealed that women are not familiar with flood warnings and forecasts.

There are no gender mainstreaming processes in flood information collection and dissemination at the community level. Radio provided flood warnings to 74 per cent of those surveyed the majority of whom were men, in terms of changes in the water levels of major rivers. About 30 per cent of respondents – both men and women – were informed by other community members regarding crop damage. Television informed another quarter of the respondents regarding flood intensity and affected areas. It was interesting to note that 28 per cent of the respondents took the marking of water gauges as a warning (CEGIS: RTI, 2004). Figure 3 shows traditional practices of information dissemination for flood prediction at the community level.

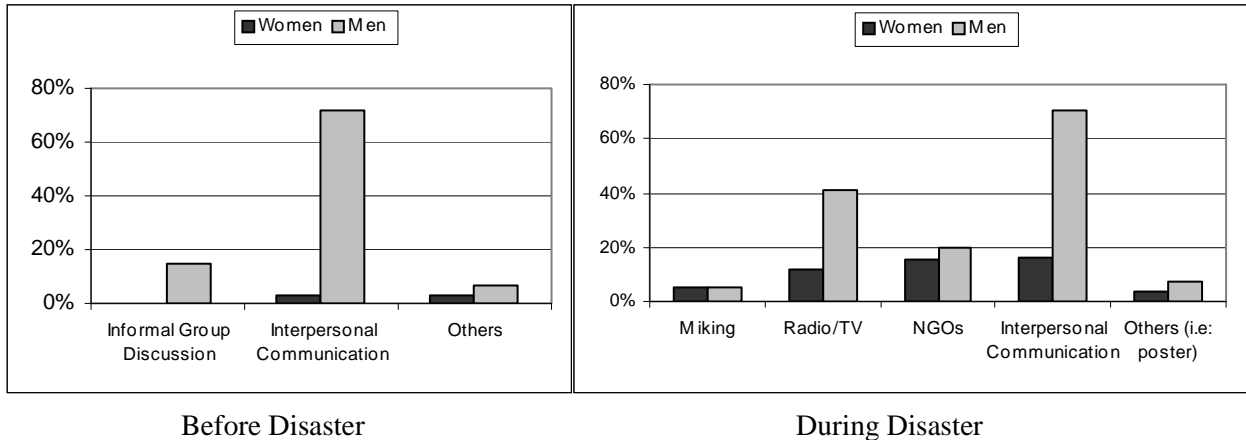


Figure 3. Communication media for information dissemination before and during flood

The lack of gender awareness in communications at the grassroots level led to limited access to disaster-related information for women. Figure 3 compares the means of communication for flood information dissemination before and during floods for men and women.

To address the need for gender mainstreaming and more effective and user-friendly forms of communication, separate discussions were held with men and women and local level institutions to hear their inputs and suggestions, using the following:

- Standard dissemination systems such as post-mail and written and oral messages;
- Consideration of women’s views and ideas regarding risk management in decision-making;
- Delivery of messages to women through beating drums and from women workers in the village. Women preferred these mechanisms over others because they have limited movement and could get information on their own through these;
- Information sharing from national institutions to community stakeholders;
- Community-level gatherings organized at mosques and marketplaces by politicians or local NGO activists;
- Dissemination of daily information through radio, TV and national and local newspapers during floods;
- Fax and e-mail if available;
- Easy-to-read maps to identify the extent of flooding;
- Flag network system (red for severe flooding, yellow for moderate flooding, green for normal flooding, blue for increasing water level and white for decreasing);
- Agents to transmit information (imams, teachers, etc.); and
- Effective forms of communication such as microphones in mosques and beating drums.

As a result of this research, which was done in preparation for that year’s monsoon season, new forms of communicating flood information were tested. The danger level for river flow was set for every village. Flood warnings in the local language were prepared using different media, including posters, photographs and audio tapes. These were selected as ways of strengthening local institutions and providing access to information, in particular to illiterate people, regarding

such activities as evacuating cattle, crop and emergency food preparedness and organizing boats for evacuation.

Results

After the monsoon, CEGIS studied the effectiveness of the measures implemented. It was found that if a warning is given one week prior to a flood, men and women are able to save their belongings and take harvest-ready crops to a safe place. As a result of the warning system being adapted to the needs of both men and women, their attitudes about information reception have changed and they are able to take precautions based on the information provided. Not only does the warning system allow them to take measures to save lives and property, it also contributes to reducing women's workload and to greater food security.

Men and women need certain information during floods which would help those affected better locate available shelter, food and transportation. In the aftermath of floods, the rehabilitation of households as well as public infrastructure such as roads, bridges and markets is imperative. At this stage, those affected require information on available assistance.

An access and control framework was developed to understand and analyze men's and women's access to and control over resources, as well as other forms of assistance, such as training and credit facilities. It was found that in terms of resources for relief, recovery and benefits, men have more access and control than women. In some cases where women have access to resources (e.g. capital for small business), they lacked control over them. This disparity indicates that for maximum gender equality and community involvement, disaster management policy and planning must be designed to address gender issues.

An impact assessment survey done for this initiative at the end of 2004 found that a gender-aware approach demonstrates the roles played by both women and men as disaster managers in the family, the community and organizations. The increased involvement of women in decision-making processes, information exchange and networking on disaster risk management can be effective in making the community safe from future disasters and ensure the best adaptation measures for minimizing risk from water-related disasters.

Another important result was identifying which institution(s) the community thought should be in charge of disaster preparedness, mitigation and rehabilitation. The household survey showed that people perceived that, among government institutions, only the lowest level of local government institutions, such as the DMI and Upazila Parishad, are involved in information dissemination, while some others are more active in physical work such as relief and rehabilitation (BDPC, 2003).

However, according to the men and women of the community, the local institutions need to play a central role. Local NGOs consulted also suggested that the government needed to lead the process and take responsibility for improving it. Survey respondents believed that the Upazila Parishad would be the best suited to disseminate gender-responsive information and to be proactive in networking in the pre-disaster period, if they were gender aware and addressed gender mainstreaming.

Life stories

Padma Rani said that timely messages which address the concerns of women in the village could enable them to prepare for floods. *“I can store dry food, my poultry, shift my paddy and raise my plinth level if I understand the language of the forecast.”*

Omar Sultan was concerned with saving his stock of paddy (about 150 mounds) at a higher location and was about to invest in moving it as the water was rising every day. But when he saw the white flag of the warning system (meaning water level decreasing), he did not shift it. He was able to save his investment on shifting. *“We understand the flag network warning system and it is helpful.”*

Conclusion

In the 2004 flood, men and women in the community studied benefited greatly from new mechanisms introduced, such as the flag network, microphones in mosques and drum beating. Some women in the community said that they are now trying to understand the flag network and the importance of flood warning information. Gender mainstreaming has enabled women's active participation in community-based flood risk management, reduced risk and vulnerabilities and strengthened women and men's capacity to cope with hazards.

The community is the key resource in disaster risk reduction, and community members are the key actors and primary beneficiaries of disaster risk reduction. Gender mainstreaming ensured participation of community members, both women and men, at all stages of the programme, including the planning and implementation of risk management measures.

National and local government agencies must engage and encourage women to participate along with men in implementing projects. They should take into account the different roles and needs of men and women, while planning all stages of disaster preparedness, relief, and rehabilitation. To aid this effort, gender mainstreaming in flood risk reduction needs to be institutionalized.

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10. NIGERIA: Using Gender Mainstreaming Processes to Help Protect Drinking Water Sources of the Obudu Plateau Communities in Northern Cross River State

By Adekana A. Majekodunmi

Ms. Majekodunmi is an environmentalist who works as a policy and research officer for WaterAid Nigeria. Previously she was a conservation/research officer for the Lekki Wetlands Environment Education Centre of the Nigerian Conservation Foundation for the past five years. She has a M.Sc. in Geography from the University of Ibadan, Oyo State in Nigeria and has won a number of awards for academic excellence. She also has several scientifically-focused publications to her credit. Ms. Majekodunmi has worked on many projects including: A Participatory Ecosystem-Based Approach to Community Resource Mapping and Land-use Planning in Bumaji, Cross River State; a Gap Analysis of Protected Area Systems in Nigeria; and Inventories of Coastal Wetlands in Nigeria.

Case study methodology: Appreciative inquiry

Problem statement

The Obudu plateau is one of two mountain ecosystems in Nigeria and home to tropical forests with unique flora and fauna, as well as large pastures. The top of the plateau is also home to the Becheve agricultural communities and the Fulani pastoralists.

In 1999 the Cross River State Government established a luxury tourist destination on the plateau, the Obudu ranch resort. This included large-scale construction of hotel facilities, cable cars, a golf course, a water park and a transport network, which resulted in immense deforestation, adding to the already stark decline of 50 per cent in the last 50 years. Combined with pre-existing pressures on the environment, such as overgrazing and unsustainable agricultural practices, the development exacerbated the stress on available water resources. Although the development brought with it the welcome benefits of employment creation and much needed income, conflicts arose due to the multiple demands on a limited water supply.

Consequently, the Nigerian Conservation Foundation (NCF), a non-governmental organization working on preserving the plateau, started a Watershed Management Project. The NCF prioritizes and mainstreams gender concerns into its organizational policies and projects nationwide. In this project the Foundation utilized a participatory approach as a means of ensuring women's involvement throughout the project cycle. Women were included at every stage of the project, including design, implementation and monitoring. The project has led to improved health, cleaner and closer water resources, and has empowered both men and women. In addition, women emerged as leaders in a male-dominated society, after the project directly addressed men's apprehensions about women's active participation in the project.

Methodology

Data were collected through focus group discussions involving groups of 6-8 male and female project participants. Interviews were also conducted with each stakeholder group: the elected women and men leaders of the Obudu Plateau management committee; Fulani herdsmen; local health clinic staff; NCF staff; and four NCF volunteers who implemented the project. A review of project documents with the Becheve Nature Reserve included the watershed ecology and monitoring training manual specially designed for the Obudu plateau communities.

The researcher collected data using the appreciative inquiry methodology, which assessed the impact of gender mainstreaming processes on the community's access to water.

Additionally, an empowerment analysis was utilized to assess the levels of change in the relationships first, between Becheve men and women and second, between the community and the Fulani herdsmen. The analysis was also valuable in examining the effectiveness of the NCF volunteers' education and advocacy efforts in increased watershed management using gender-mainstreaming tools.

Background information

The Becheve community forms one of 66 communities within the support zone of the Cross River National Park (CRNP). The three rivers, Mage, Mahe and Anyukwo, drain from the Obudu plateau down into the Park, affecting all activities downstream and the integrity of the park's protected ecosystem. The plateau's forests have decreased by 50 per cent in the last 50 years, and the CRNP authorities have been unsuccessful in trying to include the plateau under its protection.

While the Obudu plateau is made up of many communities, the Becheve live closest to the Obudu ranch resort. The Becheve communities have a population of approximately 1,800 people, which has recently expanded with the influx of developers and contractors

The patriarchal traditional village system endows men with all decision-making powers. There is a fairly rigid division of labour based on gender. Becheve men fell trees, clear forests and manage perennial tree crops (coco yam, bananas and cassava), while women manage annual crops (melon and vegetables) and process and market the crops grown by men. In addition, they are responsible for the care of children and the elderly, collecting water for food preparation, cleaning, personal and children's health and hygiene, caring for the sick as well as collecting wood for fuel. To generate income, women also work as casual or paid day labour at the ranch, planting grass on the golf course or roadside and mining sand along river courses with their children to sell to the developers. In response to the limited water supply, the Becheve women complained about poor family health, wasted time in collecting water, and poor quality and quantity of water.

When the nomadic Fulani cattle herdsmen, who hail from northern Nigeria, came to the plateau, they negotiated arrangements with the men of the Becheve community to water their cattle at water sources in protected forest areas. Due to the differing perceptions on the role and status of women, the Fulani herdsmen insisted that the Becheve women wait to draw water after their cattle were watered. This waiting would extend the women's already limited time to approximately six hours, making less time available for their income generating and other activities.

The NCF, which is dedicated to nature conservation and sustainable development, has been working in the Obudu Plateau area for approximately 20 years. Finally realizing that biodiversity could not be conserved without the active participation of communities, the organization started participatory, sustainable and renewable natural resource projects, which. These projects would enable communities to realize the wealth of their natural resources, as well as conserve biodiversity. Under the Watershed Management Project, NCF established the Becheve Nature Reserve (BNR) on the plateau to work with the Becheve community, with funding from the Leventis Conservation Foundation.

Best practices

The Cross River State government recognizes project management committees as legal entities. Hence, in January 1999 it agreed to form a multi-stakeholder management committee for the Obudu plateau. Members were drawn from: the NCF; Development in Nigeria (DIN, another plateau-based NGO); CRNP; the Obudu ranch resort; the BNR; and the Fulani herders. After a series of discussions, it was agreed that one out of three representatives from every village including the Becheve, should be a woman elected to the management committee. In addition to promoting gender equity, the committees served as a forum for conflict resolution, as all decisions would be presented to the council of chiefs for ratification.

At its inception meeting, the management committee conducted a two-day workshop analyzing current problems in order to plan a long-term solution for the sustainable management of the plateau's watershed. The NCF decided to use the meetings as a forum to educate the communities on two levels. First, in regards to participatory watershed management, they stressed that unsustainable practices affected the ecosystems of downstream communities already suffering from malaria, cholera and river blindness. Second, they used this opportunity to sensitize the Becheve community and Fulani herders on their gender biases and to highlight the women's valuable roles, contributions and perspectives in the management of water resources.

Participatory approaches include gender mainstreaming

At the initiation of the plateau's watershed regeneration programme in 1999, DIN hired a member of NCF as a consultant to conduct a study, based on the long-term monitoring, of trends in biological diversity, disturbance and regeneration in the gallery forests of Obudu ranch resort. Key recommendations included the use of an integrated watershed management approach, a participatory approach and gender mainstreaming processes in the project. The management committee was also informed that NCF and BNR staff would work with them on watershed ecology, management and monitoring.

In 2000, the project started with four interns working with staff of the BNR for approximately nine months each. The first two interns were from Canada, funded by the Canadian International Development Agency (CIDA); they served between 2000 and 2003. The second pair of volunteers consisted of two Nigerians sent by the Nigerian National Youth Service Corps who worked from 2003 to the present.

Three of the four volunteers were women, which allowed for easier access to women in the community and provided them with role models who demonstrated that women could also be in positions of leadership and contribute to the decision-making process.

In the first stage of the project, from 2000 to 2001, a watershed and watercourse mapping survey was conducted in the Becheve area and environs, concentrating on drinking water points on the plateau.

Training women to preserve watershed ecology

Between 2002 and 2003, a manual on watershed ecology and monitoring was produced by NCF. Six groups of women and a small group of youth were trained on preserving a watershed's ecology, stressing the temporary nature of the benefits of sand mining. It was recommended that fruit trees be planted around the headwaters of drinking water sources to prevent erosion, sedimentation and siltation, as well as to provide an income source. Conservation clubs were started to increase awareness about environmental education. Most significantly, women were

encouraged not only to attend management committee meetings but to participate actively in this predominantly male domain. This was the second stage of the project.

The third volunteer's entrance into the project at this point was timely for a number of reasons. Because he was a male from a local tribe (the Hausa) who spoke the dialect of the Fulani herdsmen, he was able to connect to the Fulani more effectively than the previous volunteers. The Fulani see the Hausas and kinsmen and have similar cultures. The volunteer respected women's needs and competencies, and so facilitated a process of dialogue amongst the herdsmen that resulted in them realizing that they were discriminating against the women in denying them timely access to water. This new awareness led to an agreement where the cattle would be watered at lower points to avoid contamination once the reservoirs were built.

The men accepted his recommendation for women to be involved not only in the construction and maintenance of the reservoir, but in all stages of decision-making. Women rose to the challenge by contributing to decisions on the water reservoir construction and the individual/collective roles for maintenance. As cost was an issue, locally available boulders were used instead of sheet metal. It was agreed that the BNR/NCF would pay for the cement, pipes and the stonemason with finances provided by CIDA. The community's men would carve out and transport the boulders, and the women would provide the sand. Both men and women would maintain the reservoirs.

In the third stage, from 2003 to 2004, the two reservoirs were completed in Okwa amo and Keji uku. Additionally, conservation clubs were established and fruit trees were planted. Discussions pertaining to water-related health issues, especially diarrhoea, were held with the local health clinic.

Women as guardians of family health

It was the women who had first noticed and complained about the water quality, relating it to their children's deteriorating health. Therefore, the fourth volunteer started work at the local health clinic collecting sex-disaggregated data on the health of community members before and after the reservoirs were built. She supported work to continue reservoir construction in two other communities, while monitoring the older reservoirs and one that had been reconstructed with the community monitoring team. This volunteer also continued the environmental awareness and conservation education course.

Results

The Watershed Management Project successfully integrated gender into the traditional male-dominated community by increasing women's empowerment and quality as well as educating community members about the important role of both men and women in integrated watershed management.

The project empowered women by:

- Allowing women to contribute to the decision-making process within the community: "Many women from my community could not speak at meetings but this time we spoke and were heard. The water is now closer to our houses and it is clean," reported one local woman;
- Involving women in each of the various stages of the project;
- Electing women leaders to the management committee. This was a source of great pride for all women in the community, as they were able to participate with men in the decision-making process;

- Considerably reducing the time women took to collect water. This allowed them to spend more time on income generating activities, farming and marketing;
- Reducing women's healthcare burden; there was a 45 per cent reduction in cases of diarrhoea in 2004, which meant children were less sick, enabling women to have more time for other pursuits;
- Increasing the time available for both girls and women to go to school; and
- Encouraging the women to pass along their knowledge from the conservation clubs to their children. There are now school conservation clubs, which ensure the planting of approximately 1,000 tree seedlings along water courses.

It increased gender equality by:

- Sensitizing the community's men to women's participation and showing them how it will benefit the men directly too, allowing for more equitable decision making;
- Training a total of 60 men and 113 women for construction and maintenance of the reservoirs;
- Allowing women to decide the kind of training members of the community needed as well as the placement of the reservoir, so it would benefit every member of the community;
- Creating new male champions for women's equality after helping them to experience the positive benefits of women's involvement in decision-making; and
- Creating awareness among the Fulani herdsmen that discussing and making decisions with the community women is a positive step towards improved access to water for their cattle.

The integrated watershed management project empowered both men and women by:

- Creating greater awareness of sustainable watershed ecosystems and their importance to the environment and nearby communities;
- Increasing community participation and a sense of project ownership;
- Using local knowledge, appropriate technology and local community members to lower the cost of construction and reservoir maintenance;
- Learning how to approach the government to aid community development; and
- Creating interest in other communities about the project in the Becheve community.

Lessons learned

The project successfully integrated the interests of all stakeholders, including those of women. Gender was successfully mainstreamed in the project without the women having to ask the permission of men to participate.

The male stakeholders were satisfied with the outcomes, and similar projects are being replicated in a number of other communities. NCF is particularly pleased that the integrity of the ecosystem of the Cross River National Park has been improved. They do, however, acknowledge that this is but a step within a long process to achieve gender equality and sustainable water resource management.

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V. INSTITUTIONAL CHANGE AND POLICY

11. GHANA: Gender Integration in a Rural Water Project in the Samari-Nkwanta Community

By Nana Ama Poku Sam

Ms. Nana Ama Poku Sam has a Master's degree in Environmental Policy from the Bard Center for Environmental Policy in the United States and a B.Sc. in Natural Resource Management from the Kwame Nkrumah University of Science and Technology in Ghana. She recently completed an internship focusing on Water and Natural Resources in Small Island Developing States with the UN Department of Economic and Social Affairs. She has also served as a Youth Coordinator with the Millennium Development Global Watch, a Research Assistant with the Ghanaian Ministry of Environment and Science and an Intern with the Ghana Wildlife Society. Her research and thesis project focus on the use of micro-credit in alleviating female poverty. Ms. Poku Sam has also participated in a research study to devise a management plan for the Atewa Forest Reserve in Ghana, focusing on the protection and conservation of native wildlife species. Throughout the study, she had to motivate and educate the women in sustainable living practices, empower them to live independently and reduce the negative environmental impact. In addition to her considerable research and analytical skills, Ms. Poku Sam brings her own unique perspective on water and sanitation based on her experience of years of carrying water over long distances each day for family use.

Case study methodology: Appreciative inquiry, Harvard

Problem statement

Community participation and management of water and sanitation projects in which beneficiaries have responsibility, authority and control over the development of these services are now recognized as being essential to their success (Ribot, 2002; Pretty and Ward, 2001; Gross et al, 2000; Narayan, 1995; McCommon et al., 1990). Women's participation is seen as being particularly critical.

In Ghana, traditionally women and children are the primary collectors, users and managers of household water. When water systems break down they are the most affected, since they then have to travel far in search of water for household use (Wijk-Sijbesma, 1998). Women are the key players in implementing changes in hygiene behaviour. However, despite the knowledge and experience that they bring to water resource management, the contribution and roles of rural women are often overlooked or under-utilized in the drafting of water and sanitation policies.

In Ghana there is still a gap between men and women as both agents of change and beneficiaries in the water and sanitation sector. This research therefore focused on an assessment of how the conscious consideration of gender issues has affected the outcomes of the Samari-Nkwanta Water and Sanitation Project (SWSP) in the South-western part of Ghana.

Methodology

Primary data were collected through appreciative inquiry style interviews with key community stakeholders. The main instruments used were focus group discussions, one-on-one interviews (both semi-structured and open-ended) and document analysis from a gender perspective.

Working with community facilitators, the researcher selected a cross-section of community members to interview, using a random quota sampling procedure. Her use of sex-disaggregated indicators and the gender analysis process generated data to compare the ‘before’ and ‘after’ scenario in the community and to develop a gender activity profile.

Secondary data sources included the project’s strategic plans, monitoring and evaluation reports, annual reports, World Vision Ghana (WVG)’s human resource policy documents and the community’s training manuals.

Six focus group discussions and 50 individual interviews and direct observations were used to carry out the survey. The individuals included:

- Water and sanitation (WATSAN) committee members;
- Pump maintenance volunteers (PMVs);
- Artisans for construction of latrines;
- Teachers;
- Youth (18-24 years); and
- Other community members (both men and women).

Background information

The community in which this project took place is Samari-Nkwanta, with about 650 inhabitants and situated about 373 km from Ghana’s capital, Accra. It is located in the Ejura-Sekyedumasi District, which represents about 7 per cent of the Ashanti Region, and is home to a World Vision Ghana (WVG) Area Development Programme. The community is in a rural area where farming is the main source of livelihood and engages 60 per cent of the economically active population. Before the water project, women in this area worked a daily average of 19 hours, while men worked around 12 hours a day. During the dry season when the community’s regular water sources dried up, women and girls had to walk about three to four miles over dangerous terrain to bring water and firewood to their families, sometimes more than once a day. Their primary water source area was described as “Aberewa nko”, meaning old women cannot get there. Many girls also had to abandon their schooling to search for water.

The community’s water and sanitation programmes came about in response to the need for interventions to address a serious infestation of guinea worm, which had existed among the community members for several decades. In Ghana, guinea worm is prevalent mostly in remote areas where there are few wells and where people draw their drinking water from ponds and water holes. The worm causes extreme pain and sometimes permanent disability. This problem, combined with poor access to potable drinking water in the region, led to the birth of the SWSP in 1992 (WVG, 2003).

In response to a severe drought in Ghana in 1982-1983, WVG commissioned the Ghana Water and Sewerage Corporation (renamed the Ghana Water Company in 1993) and the Ghana Water Resource and Research Institute to conduct a survey on water supply in communities where WVG operated. The 1984 survey reported the lack of potable water as a great constraint to WVG’s rural development programmes. In response, the organization developed the Ghana Rural Water Project (GRWP). Since then this project has shifted from a strictly technology-driven, “get it done” approach to a community-based, people-oriented, demand-driven focus. This included an acknowledgement that there was a significant correlation between addressing gender concerns, poverty alleviation and the well-being of children (WVG, 2000).

Through the GRWP initiative, WVG supplied the Samari-Nkwanta village with two boreholes fitted with hand pumps, two public Ventilated Improved Pit (VIP) latrines and a urinal. The community has since identified that this water and sanitation project has had a high level of community participation and gender integration and that it has brought them considerable relief in many areas of their lives.

Best practices

WVG put several measures in place to mobilize and empower both male and female community members. These included:

- Gender sensitization and awareness of community members;
- Integrating gender issues in all aspects of the project;
- Making a conscious effort to ensure that both women and men participated in community consultations by holding separate women's and men's focus groups;
- Ensuring equal representation of women and men on the WATSAN committee;
- Promoting adoption of hygienic practices and user-based sustainable operation maintenance systems; and
- Promoting the use of decentralized and participatory approaches by community members.

The male dominance prevalent in some Moslem communities in Ghana was especially apparent in Samari-Nkwanta. The women assumed that they should not seek new roles as water facility managers and discouraged other women from doing so, as it was perceived as a male role. However, WVG's decision to drill boreholes in a way that deliberately involved both women and men led community members to re-evaluate their existing gender roles. This was reinforced by the WVG ensuring that women and men were represented equally on the WATSAN committee. The women were also given equal access to training in water systems operations and maintenance and environmental sanitation methods.

The community consultations led to a realization that there was also an urgent need to construct laundry facilities close to the boreholes to meet women's needs. Culturally, washing is done at the water source and this had led to a polluted water site. It was decided, therefore, to build specially constructed laundry pads close to the borehole sites to facilitate clothes washing and improved sanitation.

In the project's planning stages, the women's focus group brainstorming sessions also identified a critical need for toilet facilities and urinals. The lack of accessible toilets meant that during the rainy season the women found it difficult to go out and defecate – unlike the men, who were able to utilize a more “free-range” toilet system. Therefore women were more motivated to develop improved sanitation to give them more convenience and privacy. The women also indicated that they would be the ones keeping the facilities clean as they considered it to be women's responsibility to maintain community sanitation facilities.

Another problem occurred during the dry season when the community's regular water sources dried up, and women and girls had to walk about several miles over dangerous terrain to bring water and firewood to their families, sometimes more than once a day. Many girls also had to abandon their schooling to search for water.

The drilling of the boreholes closer to the village has resulted in increased opportunities for girls to attend primary school and for women to go to adult literacy classes. In school, the children receive hygiene education, which they share with their parents and other household members. This reinforces the education component of the SWSP in a ‘trickle-down’ process. The women also now have more time to spend with their families. One man in the village noted, “My marriage has improved and become more cordial. We have time for other economic development projects.”

Results

Promotion of gender equality

The WVG’s conscious integration of gender issues in the SWS Project and their use of a participatory approach increased gender equality by:

- Shifting from male-dominance to a more equitable sharing of power and decision-making, particularly within the WATSAN committee;
- Increasing women’s voice and leadership, particularly within the WATSAN committee where both women and men were encouraged to choose their own representatives to allow for transparency and ease of contact;
- Increasing consideration of women’s needs and priorities. For example, when the women’s focus group noted that the timing of the WATSAN Committee meetings would lead to their exclusion due to their other responsibilities, their male counterparts quickly addressed this problem; and
- Increasing input from both men and women on decisions connected with site locations for the new boreholes.

A seven member WATSAN committee is comprised of three females and four males. User groups noted that WATSAN committee leadership was open to both sexes. Women selected for positions for which they had limited or no experience, such as treasurers, were trained by WVG in the skills needed to facilitate their new roles. They also received in-service training as caretakers, pump maintenance technicians and latrine construction artisans. They did report however, that the training was inadequate to meet the challenges encountered. Nevertheless, five out of the eight members of the male focus group were of the opinion that the idea of empowering women through the WATSAN committee was a very effective measure.

Other benefits of Water and Sanitation Project

Gender time profile and roles

Community members experienced the following changes in their quality of life as a result of their participation in the project:

- Increase of five hours per day in time available to women, which they are using to work on their farms, care for their households and engage in other productive activities;
- Development of more sustainable livelihoods as extra time enables women to take advantage of income-generating opportunities such as grass-cutter (a local game animal) domestication, beekeeping, cashew farming and other micro-enterprises; and
- Increase in the number of men helping women with water collection, since the new borehole is close to their homesteads and the women need to go to the market to sell the products from their new income generating activities.

Health and hygiene

Project education measures and ready access to a clean source of water have led to the:

- Eradication of guinea worm among the entire water user group;
- Increased awareness and acceptance that guinea worm eradication is directly related to hygiene practices as opposed to supernatural forces;
- Adoption of changes in personal hygiene practices by community members;
- Adoption of diverse ways of obtaining clean drinking water by community members, such as sieving, boiling and allowing the water to cool down before drinking; and
- Sanitary inspectors being invited by community to conduct weekly inspections.

Education

The Samari Water and Sanitation Project also led to the founding of a primary school in the village in 1993. Consequently there has been:

- A dramatic increase in girls' school attendance: in 2004 there were 105 girls out of a total 201 students in the primary school (53 per cent of the total), whereas in 1995 girls accounted for 23 of 54 students in primary school (43 per cent of the total).
- An increase in full-day school attendance, with 82 per cent of the teachers noting that students who used to come to school at 11 a.m. were now coming as early as 8 a.m.; and
- An increase in the number of primary students who plan on continuing their education to the senior secondary school level: data from the junior secondary school indicate that 10 boys and 13 girls out of 42 pupils have indicated their intention to continue.

Access to water

Increased community access to a reliable year-round water supply has also led to:

- Strong community participation in the water user groups with substantial voluntary financial participation across the user groups to ensure proper borehole maintenance (most respondents attributed their willingness to pay to the fact that they were now able to participate in income generating activities);
- Improved farming practices due to reliable access to water;
- Increased safety for women and girls; and
- Increased privacy for defecation and personal hygiene for women and girls.

Life stories

Amina Mohammed suffered from snakebite in 1990 during her search for water at night.

“It was cold, dark and late in the night, but I could not sleep because I did not have a drop of water for use. Haunted by these circumstances, three friends and I set off with lanterns to search for water in the dry riverbed where there were holes dug in it to collect water. Less than a kilometre from home I felt a sharp bite on my foot. I shouted ‘*mawuo*’ (I am dead) and lowered my lantern immediately. I sighted a snake, which quickly vanished into the bush and I saw a stain of blood on the spot. My heart jumped and fear gripped me. ‘*Mawuo*,’ I shouted again. My friends rushed me back home on their shoulders. The whole village was awake. The medicine men acted swiftly and I was given concoctions to drink. They made a series of cuts on the skin at my feet and applied herbs. I vomited the whole night and recovered at a slow pace. I thank God I am alive to tell this story and enjoy the

borehole water which is available the whole year and stands only 100 yards from my home.”

Madam Margaret Konado, a 60-year-old widow with seven children, had this story to tell.

“About 14 years ago water was really a serious problem here. I must confess that I used to bathe my seven children in the same basin and with the same water in turns once a week. The water I fetched from the water source was very dirty. The children developed skin rashes. Due to the sweaty nature of our skin, we were almost always attacked by bees, especially at the water points. The children had swollen faces for days before they were cured with herbal medications. The lack of potable water made us suffer from guinea worm. I could not go to the farm due to my swollen foot. You can agree with me that one felt incapacitated and could not engage in any form of activity. The dirty water also gave some discoloration to the food. It made us sick all the time. Now with the availability of potable water we bathe, wash our clothes regularly and my children are looking healthier. We no longer suffer from guinea worm.”

Lessons learned

The main factors that contributed to the success of this project were:

- Gender sensitization and mass awareness training and promotion used at the start of the project;
- Use of a participatory approach that was consciously inclusive of women;
- Active promotion of the involvement and empowerment of community members (especially of women) at all levels of decision-making related to water and hygiene practices;
- Ensuring that both men and women were equally represented on the WATSAN committee and received relevant training to support their participation;
- Ensuring that both female and male water users were responsible for the water system’s maintenance and operation; and
- Fostering sensitivity to both women’s and men’s issues in the community.

The use of these gender mainstreaming and participatory approaches contributed significantly to:

- An increase in the recognition and visibility of women’s roles, equal to that of men, in the WATSAN Committee, the pump maintenance volunteers, the latrine construction artisans and in the community in general; and
- A real sense of ownership of their water and sanitation resources by both the male and female members of the Samari community.

The community was able to achieve these results and more equitable access to clean drinking water and sanitation facilities primarily because the project was facilitated within an atmosphere of cooperation and coordination between men and women, as well as between the Ghanaian government and World Vision Ghana.

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12. NICARAGUA: Gender Equality as a Condition of Access to Water and Sanitation

By Magda Lanuza

Ms. Lanuza has been an environmental activist for over 11 years. She is currently working on a Master's degree in Sustainable International Development at Brandeis University and most recently served as the Research Director for the Centre for International Studies in Managua, where her research focused on macroeconomic trade agreements. She has also conducted a study for the Netherlands Development Organisation (SNV) on the Nicaraguan Framework for Environmental Institutional work and was the Coordinator of the Advocacy Programme for Environmental Policies for the Humboldt Centre in Managua for four years. Her work there concentrated on natural resource depletion, water, genetically modified organisms and intellectual property rights. Other work experience includes service as an Information Officer for Kepa Finland and with the Nicaraguan Foundation for Conservation and Development, where she worked on gender and environment issues and on environmental education. Her community service includes work as coordinator of a network of indigenous people and local organizations working on oil exploration activities and of a feasibility study on Urban Sustainable Transportation in Managua. She also serves on the Board of Directors of the NGO Foral: Forging Alliances and founded the NGO Daughters and Sons of the Corn.

Case study methodology: Appreciative inquiry, feminist, Harvard

Problem statement

In the latter part of 1998, Hurricane Mitch hit Nicaragua, leaving in its wake more than 4,000 deaths. The Nicaraguan departments of Leon and Chinandega, located in the north-eastern region of the country, were the most affected and to this day still bear the signs of tragedy. By 1999, the rural communities of this area still faced a double tragedy: a period of drought (characteristic of the area) and high levels of contamination of the scarce water sources.

For the members of the communities located in this area, the transport, use and management of water resources, as well as sanitation activities, were considered the responsibility of women and children. During this period there were no mechanisms that facilitated gender equality to accomplish these tasks or social recognition of the problems women and children faced as they conducted these activities.

The human and environmental impact and the losses due to Mitch resulted in the creation and expansion of several institutional programmes in the area. CARE-Leon already had expertise in water and sanitation and health education, thanks to their implementation of an earlier Water, Latrines and Sanitation Project (PALESA I), from 1995 to 1998. In early 1999, the Water and Sanitation Programme (AGUASAN) of the Swiss Development and Cooperation Agency (COSUDE) began a partnership with the Leon Office of CARE International in Nicaragua, to implement the PALESA II project, with the goal of improving access to water and sanitation for the 17,000 inhabitants living in the 45 communities of these two Nicaraguan departments. COSUDE's AGUASAN programme was first involved in the implementation of the PALESA II project from 1999 to 2001 and later with the implementation of the PALESA III project between 2002 and 2003.

This project was characterized by an institutional commitment of both COSUDE-AGUASAN and CARE-Leon to gender equality, which was deemed a priority in order to achieve the project's

main goal of improving the rural population's quality of life. Gender equality was identified as a priority for community participation and project sustainability.

Methodology

The variables identified in the case study were: access to water; the sanitary conditions in the rural areas; and the sustainability of the water systems, once the donor agencies were no longer present.

Both primary and secondary sources of information were utilized and the data disaggregated by sex. The main documents of the PALESA II and III projects and of the AGUASAN project were reviewed, paying special attention to the materials that dealt with gender issues. Personal interviews were also conducted with members of the community's Water and Sanitation Committees, the project staff and donor agencies. A focus group was also utilized, in addition to life stories.

The research for this case study was conducted in five rural communities that participated in the project.

Background information

In Nicaragua, 43 per cent of the population lives in rural areas and only 46 per cent of this subset has access to potable water and sanitation. The departments of Leon and Chinandega are characterized by vast underground water sources; however, the population and local authorities emphasize water scarcity as the main problem. This issue has been aggravated by population growth and the inherited environmental deterioration resulting from agricultural industrial crops, in addition to increased contamination of all water sources due to hurricane Mitch.

The human and environmental impact and the losses due to Mitch resulted in the creation and expansion of several institutional programmes in the area. CARE-Leon already had expertise in water and sanitation and health education, thanks to its implementation of PALESA I from 1995 to 1998.

In 1995 COSUDE-AGUASAN and CARE-Leon began a review of their institutional gender policies. During the implementation of the PALESA II project, the institutional practices, approaches and policies on gender of both agencies were fundamental pillars in the implementation of the methodology in the benefited communities.

Best practices

The fusion of AGUASAN's gender policies with CARE's gender approach guided both institutions to work together and complement each other's institutional practices, ultimately resulting in favourable project results. The AGUASAN project selects members and counterparts who are interested, available and capable of integrating a gender perspective, while the project team and CARE-Leon gained experience dealing with this issue.

From the project's inception, a gender perspective on access to water and sanitation was explicitly stated in the main objective. Every component within the project contributed elements that in the long term increased the project's overall sustainability.

The project's team maintained a gender approach throughout the project. The hired staff included both women and men, providing equal opportunities. A woman filled the Social Area Coordinator role. She had experience on gender issues and also oversaw the project's training and education components. An internal education and institutional strengthening programme was conducted aimed at the almost 1300 community participants, as well as at staff, in order to resolve the pronounced gender inequalities in the area. Additional activities, such as a co-ed motorcycle training course, allowed for the gender approach to be implemented among the project staff.

Project approval rested on the condition of developing a needs assessment with a gender approach. This in turn directly contributed to identifying the needs and demand for services within the communities and among staff.

The methodology used to ensure the participation of both women and men in the decision-making process took into consideration ways to reach out to them. According to community members, there were no gender role differences among the promoters that visited them. Although one participant did acknowledge that she felt more at ease interacting with a female promoter, she then added that there were no actual differences when she interacted with a male promoter.

The promoters, both women and men, lived in the community three days out of each week in order to gain the trust of all community members. Invitations to the community assembly, a democratically-run community-wide gathering that is traditionally called by local leaders, were distributed by sectors, and promoters waited for the time when men would be home, usually in the afternoon.

The promoters, both women and men, recorded the gender inequalities they found in the use, transport, and management of water. The division of labour, context and gender roles explains the disparity between the two main uses of water as identified by men and the 11 uses identified by women.

A gender sensitization workshop was launched to teach both men and women the importance of their integration into the planning, organization, direction, construction, and administration of water systems. After conducting three sessions (one consisting only of females, one of males, and one mixed), men's perception on the use of potable water and sanitation changed. This resulted in more than 85 per cent of the 687 male participants understanding that handmade wells may not be secure sources of potable drinking water. In reaching that conclusion, they also accepted that the project's alternative solution of home connections would benefit the community at large, both women and men.

In the beginning, both women and men beneficiaries thought that three years to implement a water system was exceedingly long. However, they later acknowledged that this time frame was needed to advance the equal participation of women and men from inception to the sustainability of managing the system.

In the Nuevo Belen Assembly, it was observed that women of all ages participated in greater numbers than men: women made up 65 per cent of the 93 assembled community members. This fact, combined with women's outspokenness on the project's proposals and concerns, demonstrated an empowerment on their part in managing this resource.

Although the first meetings were composed mainly of men (70 per cent), women became the primary developers of the Water and Sanitation Committees and continued to participate throughout the project implementation. The Committees organized and directed the community

before and after the construction of the water and sanitation systems. Women's persistent participation earned them more than 70 per cent of the Committees' posts, as coordinators, vice-coordinators, financial managers and other jobs that were previously filled by men.

Women's participation in training, operation and maintenance of the 276 water works constructed by the PALESA II project was encouraged, resulting in a 37 per cent participation rate of women (21 of the 57 operators were women). This was notwithstanding the initial perception of the men that these were "macho" jobs (chauvinistic views).

During the second year, both women and men promoters modified their planning. These modifications took place to accommodate the increased participation of women in the construction of latrines and water systems. For example, primarily women completed some of these construction projects, such as the cement household water tanks (*pilas*).

Results

The gender training and sensitization levels achieved by the PALESA project's staff with the support of AGUSAN instilled dynamism into the promoters' communications and interactions.

The community needs assessment with a gender approach contributed to the men's acceptance of the construction of home water systems as being a necessity, and not deeming it as a luxury or frivolous expense. They continued to have power of expression within the community, but it was also demonstrated that the community prefers women to lead the Sanitation and Water Committees.

The gender workshops conducted in 2001 and 2002 with women and men guaranteed greater women's participation (56 per cent). According to some women and PALESA's staff, the discussions on sex, gender, self esteem, identity, rights and commitments benefited women directly. However, they also changed men's perceptions about the management and use of water.

The methodology utilized in the education and training component increased the knowledge and the information levels of women living in rural areas, who were previously in a disadvantaged position. Once the water systems were installed, the female leadership with its capacity and quality moved to other initiatives.

Life stories

Miriam Antonia Norori, electrician, Coordinator of the Water and Sanitation Committee of San Benito Uno, Chinandega.

"One of the most evident successes is the improvement in the population's quality of life. According to data from the Committee, the cases involving diarrhoea decreased by 50 per cent over one year. My community project is a model, not only because there is access to potable water in every household and sanitation, but also because of its educational components. It is now possible that a woman like me can be the key to continuing to train others to be involved in maintaining the functioning of such a large water system. By these means, repairs to the system are guaranteed to be completed by men's and women's participation, without incurring the expenses of hiring qualified workers."

Marlene Olivas was elected president of the Water and Sanitation Committee of Nuevo Belen, a rural community now inhabited by individuals displaced by hurricane Mitch.

“I had never before been at the forefront of a responsibility in my community, but I was elected the president of the Committee for a five-year term. The best outcome of the project has been solving people’s right to water and sanitation, but I also greatly value having had the opportunity to work on gender issues, because this became my catalyst to become a leader. I am also responsible for collecting the monthly payments for every household, who pay a maximum of US\$ 3.00. However, for many families this payment is almost impossible to make in full every month due to unemployment. This being the case, I designed an accessible payment plan.”

Conclusion

It has been possible to improve the quality of life of the different rural communities where PALESA II and III contributed water systems. These systems have been possible to a great extent because of the personal commitment from various actors.

The success of integrating gender equality in the access, use and management of water and sanitation within the water project was a result of the institutional practices and specific methodologies developed, which had a positive impact on the rural communities. On one hand, the fusion and coordination of the gender approach and policies of both agencies consolidated the project’s goal of providing equitable and participatory access to water in rural communities. On the other hand, the commitment of the Leon project director and the Social Area coordinator, combined with the levels of training and knowledge of the men and women promoters, aided in the realization of the goal.

Moreover, the awareness levels gained by a large part of the population, especially rural women, contributed to achieving a significant participation in different cycles of the project of young, middle-aged and elderly women, including mothers with numerous responsibilities. It is women who are outspoken about the advantages of having a water system in their homes, including time saving and sanitary conditions that did not exist before. Women also value the increased levels of communication and coordination with their partners, and within the community at large that had not occurred before.

The training investment demonstrated the importance of including an education component in water projects. The education component influenced a change in attitude, particularly among men, of viewing water as vital necessity. They recognized that access to water is a human right, one that should be attainable by all men, women, and children in equal conditions and opportunities.

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13. INDIA: From Alienation to an Empowered Community – Applying a Gender Mainstreaming Approach to a Sanitation Project

By Berna Ignatius Victor

Ms. Ignatius Victor works in the water and sanitation sector as a Project Officer and Hygiene Educator for WaterAid, an international NGO. She specializes in managing and delivering community hygiene education programmes for community members, as well as WaterAid and partner staff. Much of her work is focused at the school and village level. She works in both urban and rural environments and has conducted research on the impact of programmes on the control of diarrhoea in children living in slums. She has also worked as a social worker, serving at different times as an addictions counsellor and a teacher of the visually impaired and intellectually disabled. Additional work experience includes field work with street children and service as a literacy campaign district coordinator. Ms. Ignatius Victor holds a Master's Degree in Rehabilitation Science.

Case study methodology: Appreciative inquiry

Introduction

Only 43 per cent of the urban population in India has access to basic sanitation. In the low-income slum settlements, 15 per cent of the households have their own toilets and another 21 per cent have access to community toilets. Community toilets, for which there is no established management system, are not well maintained.

This case study documents the community sanitation project implemented by the NGO, Gramalaya, in eight slums in the Tiruchirapalli district (also known as Trichy town) in Tamil Nadu State, in southern India. The project involved the formation of women's self-help groups, the construction and rehabilitation of community sanitation complexes and the establishment of a community sanitation facility management system by the women. It is a powerful example of an urban sanitation project where the use of a gender mainstreaming approach contributed significantly to the project's success.

Methodology

The researcher collected primary data through checklists, questionnaires, focus group discussions, and interviews with men, women, and children from the target/project area as well as with staff of Gramalaya. She also reviewed data at the project's initial and later stages, conducted baseline studies twice during the project duration and reviewed various background documents provided by Gramalaya.

Background information

Social and gender issues

Slums are the products of failed policies, ineffective governance, corruption, and inappropriate regulation, combined with a fundamental lack of political will. This project tackled several of these issues effectively.

In the two main towns in the Tiruchirapalli district, Tiriuchi and Srirangam, there were 155 and 136 slums respectively with a total population of over 115,000 persons².

Typical occupations for men living in slums include labourers and menial workers, while women work predominantly as maidservants and homemakers. Many are from the *harijan* (lowest) caste and live segregated from a society that considers them unclean. A lack of education has often led to the exploitation of these community members by outsiders. This in turn has created a general suspicion of people who do not live in the slums.

Disunity, lack of awareness about the world outside and a sense of alienation from society were the ruling attitudes among them. They were disinterested in life and keeping their body and soul together was a daily battle accompanied by poverty and the attendant vices. Alcohol abuse was rampant among the men, as little incentive exists to spend their earnings on anything other than alcohol. The slum residents hated their surroundings and circumstances, but lacked access to the options that could relieve their misery.

Prevalent gender beliefs held that wives should obey their husbands implicitly, acting almost like serfs. This male chauvinism was apparent when women being interviewed were reluctant to even mention their husband's names. The little power they had was to manage the family on whatever funds their husbands chose to give them.

There was no communication link between government officials and the people living in the slums. Men had some interaction with outsiders, but the women lacked awareness of government services and schemes, beyond knowing that they should vote during elections. On the rare occasions that government officials visited these slums, the women were afraid to meet them. Many women had never stepped into a bank in their lifetimes as they thought this was a man's job.

Community water and sanitation issues

The eight slums had six community dry latrines in which human wastes fell into an open pit. There were also two latrines with septic tanks constructed by the municipal corporation. However, the latrines had all become unserviceable due to the poor maintenance of any municipal infrastructures created before April 1999.

Additionally, the lack of adequate water and drainage facilities in the community caused disuse and apathy among the residents. For decades they had used the broken toilets or pavement area, or open drains in front of houses for defecation. It was a way of life they generally accepted, despite its harshness.

Women held their noses with the end of their saris to escape the stench, but they had no choice but to continue to use the pits. To overcome embarrassment the women covered their faces while defecating or waited till dawn or dusk to prevent being noticed. All found it preferable to locate a tiny bit of land for defecation and use this small space repeatedly.

Men and women sanitary workers from the lower castes collected the human waste from the pits, and swept them to the side, creating a huge mound of human waste that was a hazard to

² See S.Damodaran, D., Executive Director Gramalaya, 2001. Sanitation promotion through poor urban women.
<http://www.worldtoilet.org/articles/wts2001/Sanitation%20Promotion%20Through%20Poor%20Urban%20Women.pdf>.

community health. The city did not have underground drainage, so the rains would dislodge the waste and float it around the community. This wastewater often entered the households. Waste accumulation also caused blockages in the latrine complexes, which government bodies were expected to clear, but did not do so.

The usual government practice was to contract companies to carry out waste and sanitation-related construction work, without any consultations with community members. A lack of supervision led to unfinished work and, in one instance, the contractors simply locked the new toilets and did not open them for two years.

The women in Viragupettai reported that “the non-maintenance of the latrines caused faecal worms to generate and reproduce, and they could be found nearby the water taps, and even inside the walls of their houses.” Poor sanitation and contaminated water affected all families with disease, increasing their medical expenses.

Water tankers supplied the community with drinking water, but there was considerable wastage as well as fights to collect water.

Male community leaders were content with the day-to-day existence and did not take any steps to provide improved facilities. Requests to the government for better services were of no avail until they joined forces with Gramalaya.

Stakeholders involved

To address this situation, in 2000 the state authorities for urban affairs in the Tiruchirapalli district proposed involving NGOs to encourage people’s participation and empower women under the Namakku Name Thittam (We for Ourselves) programme. Gramalaya and two other NGOs formulated the project with funding from WaterAid. The funding enabled the project to serve a total of 25 local slums in various communities, with guidance from the district collector and the Commissioner of the City Corporation. In Gramalaya, eight slums in total benefited from the project.

Gramalaya had prior experience in water, sanitation and hygiene projects in rural areas, and in working for dissemination and change with women’s groups. The project design called for:

- Forming women’s self-help groups as the primary community mobilization and sanitation management mechanism;
- Using the self-help groups to establish a savings and credit scheme related to the project;
- Converting dry earth communal pits to water-seal latrines;
- Installing low-cost individual toilets;
- Installing underground drainage systems and garbage bins to dispose of solid wastes;
- Installing drinking water facilities;
- Providing related training for local mechanics and masons;
- Providing training for the women’s groups in accounting and accessing finances and services from the government; and
- Providing family counselling.

WaterAid covered the equipment and installation costs, while Gramalaya was responsible for the capacity building and community mobilization components. The Government provided the land sites, electricity, water supply, and loans to community members.

Best practices

Facilitating a change process

The project staff's initial work was slow and difficult. As a result of having been let down in the past community members were reluctant to trust the efforts of government, politicians and NGOs,. Garamalaya worked with the community to change this situation by following the project design illustrated above as well as by:

- Demolishing old structures, cleaning up garbage and human waste so that the community started to believe again;
- Forming the first self-help group of 20 women. These women contributed to a savings account to support the project, which gave them increased confidence as they were able to access credit and determine their own interest rate;
- Convincing men to support women in their new roles following their initial resistance;
- Providing daily support to and interaction with the women to strengthen their new confidence;
- Assigning the full responsibility for collecting and distributing savings to the women after each group's formation; and
- Encouraging new start-up group activities in savings and social interaction.

Sanitary complex maintenance

The introduction of a 'pay and use' system was discussed and agreed upon by the women's groups and was critical to facility maintenance. It was agreed that each person would pay half a rupee (US\$ 0.01) per usage and that each group member would take turns to serve as a caretaker so that the sites would be staffed day and night. The women's husbands accompany them for the night shifts. Tokens are issued before usage, which help to keep accounts and monitor the number of users.

The women also set up a maintenance system in which both men and women take turns cleaning the complexes twice a day. The system greatly improved the hygiene levels in the complexes.

Results

The project has had remarkable results at multiple levels.

Women's empowerment

- Women learnt vocational skills, including how to repair hand pumps;
- Women now look after family and community budgets and are able to maintain the self-help group's accounts with both transparency and accuracy;
- Women are now also able to make decisions related to water and sanitation;
- Women have increased privacy and access to clean facilities;
- Men now look up to their women with respect and admiration;
- Women have a new sense of self-esteem;
- The women's groups increased in such numbers that they formed a city-wide federation, Ezhil Iyakkam, to work towards improving the quality of life in the slums;
- The project's success has attracted visitors from all over and has given the women considerable recognition; and
- As a result of the gains made by the women in the project area, women from the slums in Orissa State have now begun a similar initiative

Men's involvement

Initially men were against the women becoming more empowered. They asked the Gramalaya staff why women were given so much importance and demanded assistance in forming men's groups. This problem was aggravated by the fact that local politicians would foment conflicts among men's and women's groups in order to get votes in future elections. They reasoned that when community members gained awareness and skills resulting from the capacity building and empowerment activities provided by the NGOs, it would be more difficult to get their votes. However, with the intervention of Gramalaya staff, the men gradually changed their attitude to one of cooperation. The meetings Gramalaya held with the men served to increase their understanding that this programme gave importance to women's roles and improved their status, and that this was of benefit to none other than their own wives, mothers and sisters. The men also came around when they started to see the benefits the women's groups generated. In the end, they began to participate as volunteers to clear debris and for other works, to realize that women could tackle many problems and even to encourage their wives and female relatives to participate.

Income from 'pay and use' toilets

A 2002 expenditure statement showed that one public sanitation complex with 20-seat capacity generated an income of about Rs. 365,000 (or almost US\$ 8,000 in 2000) in one year with a total of close to 730,000 paid usages at Rs. 0.5 per usage. From this revenue 39 per cent was utilized for complex maintenance and 61 per cent for community development activities.

Community development by women

The income from the sanitation complexes was used for a variety of works, including:

- Bore-well hand pump renovation and street tap repairs;
- Construction of a community hall, well and drainage facility;
- Toilet renovation works;
- Sanitary complex maintenance;
- Loans to nearby slums for toilet construction;
- Running a computer centre;
- Social welfare activities such as the celebration of water day and women's day;
- Special units for adolescent girls, cottage industries, and small shops; and
- Loans for education and other purposes.

Vermicomposting - sanitation and income generation

The Ezhil Iyakkam Federation discussed what to do with the wet and decayed vegetables generated by the nearby market and thrown near community latrines. In response, Gramalaya sought external training and then converted this waste into a resource by providing composting expertise to the women. Now women in one of the slums generate compost, which they are able to sell for a good price.

Emergence of innovative child friendly toilet (CFT) complex

The women's groups realized that, if children do not use toilets, the slum would never be clean. One of the women observed that, "as our children are habituated to using the drainage system for defecation, something similar to squatting on a drain type model was needed." This led to the invention of a child-friendly toilet. About 230 children now use a child-friendly complex that the community built with walls separating boys and girls. Children's toilet usage was a big step forward for achieving total sanitation in the community. There is no payment required for the children's toilets and the women's groups clean them.

Improved sanitation facilities

There are a total of 201 new pour-flush toilets with 104 for men and 97 for women. Formerly there had been only 90 toilets with broken seats, which served 5817 people. Now there is no need for the emptying of septic tanks, as the new toilets are all connected to the newly created and expanded government underground drainage system. The new sanitation complex has about 900 users on average per day.

Changes in key hygiene behaviour

The following changes in people's hygiene behaviours were confirmed by the comparison of baseline data at the start and midpoint of the project (1999 and 2001 respectively):

Hygiene Behaviour	Before (per cent)	Midpoint (per cent)
Dipping hands in container	70	26
Hand washing without any washing agent after defecation	75	2
Ownership and use of household toilets	8 (also with unsafe disposal)	22 (with safe disposal)
Percentage using community toilet	40 – damaged facility	64 - using new or renovated facilities
Children affected by diarrhoea	73	10
Children's use of toilets	0 (100 per cent practiced open defecation)	90
Percentage of monthly family income spent on medical expenses	36	4

Lessons learned

The reasons for this integrated water and sanitation project's success were:

- The project's focus on women's empowerment, including the formation of women's self-help groups and the related savings and credit scheme run by the women;
- Open discussions with male community members regarding the benefits of increased women's empowerment to themselves, their families and the community;
- Capacity-building of the women's groups in the areas of accounting and accessing government services;
- Provision of family counselling on domestic violence and communal problems;
- Daily contact with and support of the women's groups by Gramalaya;
- Development of community sanitation facilities managed by the community;
- Adoption of a 'pay by use' system that supported both facility maintenance and community development activities; and
- Collaboration between the government, NGOs and the community.

The development of water and sanitation facilities using a model based on women's empowerment will bring success to a country where 70 per cent of the population currently still defecate in the open. This project's impact clearly demonstrates that a gender mainstreaming approach should be included in all development programmes to address issues more effectively and obtain the maximum benefits.

In Tiruchirapalli, not only is the community benefiting from improved water and sanitation facilities, improved health and increased resources to support community development initiatives, but the women have also gained enormous self-confidence. Women who were once treated poorly by officials are now given respect and allowed to sit on chairs when they visit government offices. Not only their men, but others outside also now admire them, and they receive a stream of visitors from all over. Their lives have a new meaning filled with hope.

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14. UGANDA: Mainstreaming Gender into Policy: Examining Uganda's Gender Water Strategy

By Florence Ebila

Ms. Ebila is currently a graduate student at the University of Wisconsin, Madison. She is also a lecturer in the Department of Women and Gender Studies at Makerere University, Kampala, Uganda, where she has taught since 2000. She specializes in research on gender and oral history and holds a Master's degree in Women's Studies and a BA in English Literature. Ms. Ebila has coordinated several gender and development projects in Uganda as well as the publication of the Occasional Papers Series for Women and Gender Studies Master's students. She has worked on diverse projects, including: a research project to discover women's lost voices in Eastern Africa; a study on gender and development planning in the decentralized local governments of Mubende and Kumi Districts; and a study on violence against women in the Apac District. She also serves as the Country Coordinator for Women Writing Africa (WWA), a research project of the Feminist Press of New York. Ms. Ebila has conducted numerous gender-training sessions at the community and institutional levels, and has performed extensive community work, including service as the Chair of the Centre for Domestic Violence Prevention in Kampala.

Case study methodology: Harvard

Problem statement

Although Uganda is known for having a very gender-sensitive approach to development, in the late 1990s some policy areas still needed improvement, including in the water and sanitation sector. In 1999 the Government had formulated a Water Policy, and in 2003, the Directorate of Water Development (DWD) recognized the need to develop an explicit strategy to introduce gender mainstreaming into its plans and activities. However, the DWD realized there were not any clear guidelines on how to do so, despite the fact that gender cannot be divorced from effective water management and use. This study uses the case of the DWD to examine and analyse how the water sector in Uganda has been able to incorporate gender concerns in their development planning by drafting guidelines for gender mainstreaming.

Methodology

This study used the Harvard case study methodology to analyze the 2003 gender strategy of the DWD and to identify elements relevant to institutional change within the organization. Detailed information was obtained from the DWD staff in order to analyze the impact of gender mainstreaming within the Directorate. The researcher also conducted key informant interviews with personnel from the DWD in Kampala and reviewed policy and other relevant documents.

Background information

The Water Sector Gender Strategy is an initiative of the Directorate of Water Development and aims to enhance gender equity, participation of women and men in water management, and equal access to and control over water resources and sanitation in order to alleviate poverty. The DWD is the lead planning and monitoring organization in the water sector and falls under the direction of the Ministry of Water, Lands and Environment.

The policy environment

Prior to the Water Sector Gender Strategy, the Ministry of Water, Lands and Environment participated in several international and regional conventions that reflected the commitment of the Government of Uganda to mainstream gender in all development activities, and in the water sector specifically. In 1980 Uganda endorsed the broad objectives of the International Drinking Water Supply and Sanitation Decade. In 1992 Uganda endorsed Chapter 18 of Agenda 21 on freshwater resources, which resulted from the UN Conference on Environment and Development (UNCED) in Rio de Janeiro. Uganda also participates in several regional bodies that emphasize cooperation in the water sector, including initiatives such as the Technical Cooperation Committee for the Development and Environmental Protection of the Nile Basin; the Inter-Governmental Agency for Drought (IGAD); the Kagera Basin Organization (KBO); and the Lake Victoria Fisheries Organization (LVFO) (Republic of Uganda, 1999: 5). Uganda's Minister of State for Water, H.E. Maria Mutagamba, is currently Chair of the African Ministers' Council on Water (AMCOW).

Nationally, Uganda's 1999 National Water Policy is a clear manifestation of the government's commitment to streamline and integrate gender concerns in the water sector. It is based on the guiding principle of the Uganda Water Action Plan 1993-94 and the Dublin-UNCED process and Agenda 21. Principle No. 4 of the Dublin Statement (adopted at the International Conference on Water and the Environment, Dublin, January 1992) recognizes that "Women play a central part in the provision, management and safeguarding of water."

Uganda's Constitution also clearly states that:

"The state shall endeavour to fulfil the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that all Ugandans enjoy rights and opportunities and access to...safe water" (Republic of Uganda, 1995:6).

Articles 30-39 of the Constitution also guarantee Ugandans' rights and freedoms. Specifically, Article 33.1 states that, "women shall be accorded full and equal dignity of the person with men;" and Article 33.4 that "women shall have the right to equal treatment with men and the right shall include equal opportunities in political, economic and social activities" (Republic of Uganda, 1995: 30).

Preparatory training

In 2001 the Directorate conducted a gender analysis of the water sector, which formed the basis of a policy workshop. The 2002 workshop was attended by representatives of stakeholders from the following Ministries: Health; Gender, Labour and Social Development; Agriculture, Animal Husbandry and Fisheries; and Education and Sports and Finance. Other stakeholders came from the over 80 non-governmental organisations working with the DWD. In 2003 the Directorate also held workshops for these same stakeholders on performance management and information systems. The workshops convinced the Uganda Bureau of Statistics to disaggregate the data it collects on water by sex. Workshop participants also identified a need to develop a strategy to mainstream gender in the water and sanitation sector in greater depth than was outlined in the 1999 Gender Water Policy. This led to the development of the Water Sector Gender Strategy in January 2003.

Best practices

The Water Sector Gender Strategy set out clear aims, rationales and targets.

Goal

“The strategy aims to raise awareness of gender issues from the national to community levels, build capacity of sector institutions to recognize and utilize opportunities for gender mainstreaming, increase the number of female professionals in the sector by 30 per cent over a 10 year period, improve organizational culture and support implementing agencies to implement services in a gender responsive manner, leading towards empowerment and sustainable development in the water sector” (DWD, 2003:6). The Strategy is designed “to provide guidelines to water sector stakeholders on how to mainstream gender in their work plans and for the planning and implementation of water and sanitation programmes within the decentralized districts.”

Rationale

The primary rationale given for this strategy was that:

- Water usage in communities is affected by the gender division of labour, which is to a large extent a social construction of each community; and
- The development objective of the water sector is to improve “living conditions for the population of Uganda through better access to improved and sustainable water and sanitation related services with a special focus on the poorer sections of the society” (DWD, 2003: 1). In Uganda, the majority of the poor are women.

The strategy also takes an explicit empowerment approach and observes that this “will enhance gender equity, participation and access and control to resources in the water sector [and lead] to poverty alleviation” (DWD, 2003:6). The DWD commissioners interviewed confirmed that this goal still remains the guiding principle in its work.

Strategy objectives

The strategy focuses on increasing gender equality as a means of meeting DWD’s overall development objectives, including to:

- Commit adequate resources to gender activities in the sector (planning, implementation, monitoring);
- Strengthen planning, monitoring and evaluation systems to design, develop and implement projects using sex-disaggregated data; and
- Strengthen the capacities of partners and executing bodies to mainstream and support gender balance of staffing in the sector (DWD, 2003:7).

The Senior Social Scientist in charge of gender for the DWD noted that all four of the Directorate’s Departments have technical staff who handle ‘hardware’ activities on water as well as social scientists who handle the ‘software’ activities. Gender falls under the software activities, while the hardware activities come under engineering and physical infrastructure.

The Strategy outlines DWD’s gender targets for 2003-2008 and gives specific measures and targets to manage the integration of gender into both the software and hardware sides. The Strategy’s 11 targets are summarized below:

- Women and men will be represented in all decision-making forums of the sector, including the Water Sector Coordination Committee, the Water Policy Committee, and district and community water and sanitation committees and water users committees;

- Commitment will be secured from top management and investors in the sector to work towards greater gender equality;
- The four water departments will review anchor roles related to gender in the job descriptions and terms of reference for senior staff, commissioners, technical assistants and short and long term staff;
- Capacity building for gender training and analysis will be undertaken for the water departments, districts and counties and communities;
- DWD will become a women-friendly workplace and will support the development of gender-responsive human resource policies and practice;
- Institutions feeding personnel into the sector will collaborate to incorporate appropriate gender curriculum and to improve admission targets by 25 per cent. Executing institutions (DWD, the Department of Gender and Women Studies, NGO partners, and private companies) will improve their male: female ratios by 30 per cent through a process of affirmative action, and will also adopt and enforce gender-responsive work policies;
- Learning platforms related to gender will be established involving NGOs, the National Water and Sanitation Cooperation districts, and institutions of higher learning;
- Financial and human resources will be consistently allocated within the next five years (2003-2007) to build capacity at community and governmental levels in gender analysis, monitoring, and other activities outlined within the strategy;
- Emphasis will be on developing and use of sex-disaggregated data to strengthen monitoring and evaluation and enable DWD to track information on the impact of water supplies on health and workload, levels of participation, quality of participation and overall awareness;
- All planning and policy development will maintain a poverty focus, aiming to improve the representation of the poor and increase their options for creating wealth; and
- Use of the Participatory Hygiene and Sanitation Transformation (PHAST) tool will be adopted to integrate water supply ‘hardware’ with awareness building on gender at the community level, hygienic use of water and community-based monitoring of water supplies at community level. This will enable women and men to select suitable technologies and cost sharing options that meet their abilities (DWD, 2003: 3-4).

Challenges

Gender imbalances in staffing

The main challenge in implementing the Water Sector Gender Strategy is that the DWD does not have control over other branches of the government. For example, recruitment in the water sector is advertised and handled by the Public Service Commission, which has a different mandate from the water sector. This has implications for the Directorate’s plans to improve their male/female staff ratios as reflected in the table below.

Currently there are only a small percentage of women working at the DWD. This is mainly due to the fact that until recently water issues mainly focused on technical skills related to science and engineering. In Uganda historically there have been few women in the sciences so this has created a significant gender imbalance within the DWD.

Staffing by sex within the DWD 2005

Gender	Support staff	Junior officers	Senior officers	Top Management	Total
Male	74% (104)	80% (132)	87% (36)	90% (9)	79% (281)
Female	26% (36)	20% (32)	13% (5)	10% (1)	21% (74)
Total	140	164	41	10	355

Thus, initially there did not appear to be an immediate solution to such a large gender imbalance this created. However, there is now a general awareness of the need to have more gender-aware and sensitive personnel who will work to mainstream gender at the DWD regardless of their sex.

The Strategy also proposes using the following measures to improve gender balances in the water sector by 30 per cent in 5 years:

- Affirmative action in recruitment and internships in all departments;
- Resource a full time and permanent senior social scientist to oversee and manage staff in the implementation of the gender strategy and the community development training component;
- Advocacy, training of private sector contractors, and the sensitization of local leaders, authorities and district steering committees;
- Identification of male allies in the gender mainstreaming process who will be trained and tasked to oversee the gender goals within their respective departments/sections; and
- Improving the representation of women in all decision-making bodies in the sector, particularly in the water policy committee, the water and sanitation coordinating committee, joint review meetings and bilateral reviews.

Working with partners

Other strategies include forging a gender-friendly working environment that accommodates the needs of working mothers as well as young men and women, and non-tolerance for sexual harassment.

Mr. Mugeiga, the Social Scientist for the Rural Water Department, noted that the collaborative approach used by DWD in working with multiple NGOs and institutions throughout the country is a critical part of the DWD's new approach to water and sanitation service development and delivery. Therefore the commitment to work on building their capacity to deliver gender-sensitive services is also critical and means that the DWD needs to bring all of its partners in the gender mainstreaming process on board and to encourage them to adopt similar policies.

To address this challenge, the Ministry of Gender, Labour and Social Development formed a gender working group with representatives from the different government sectors. This initiative helps strengthen collaboration and coordination among the government ministries, NGOs and donor groups that are advocating gender mainstreaming in all development plans and activities.

Results

Gender integration in planning

The Strategy's guidelines are now integrated in the DWD's annual planning process. This involves the following steps:

- Individual staff in each department draft a work plan for the activities for which they are responsible at the departmental level following the policy guidelines outlined by the Water Sector Gender Strategy;
- The hardware and software sides of each department then consult with each other to integrate their different work plans;
- The Department Commissioners review these departmental work plans to ensure that they correspond with the targets outlined in the Strategy's policy action plan for 2003-2007;
- Next, the four Departments meet to present and review their work plans and the Senior Social Scientist helps them analyze how they have incorporated gender into their planning, while the Finance Advisor evaluates the feasibility of the proposed plans. The different officers then revise the plans accordingly; and
- The Senior Social Scientist later checks and evaluates how gender-responsive each Department plan is and revises them where necessary.

This method of planning has helped the Department of Water for Production develop a highly gender-responsive approach in its 2003-2015 strategy. The objectives of the related action plan have clear gender-integrated activity profiles, time frames and actors for each activity. The officials in charge of each department are also held accountable for integrating gender according to these guidelines. There is clear evidence of collaboration between Commissioners and the Senior Social Scientist at DWD. From the interviews, it was confirmed that the Commissioners always consulted with the senior Social Scientists to draw up and review these plans. It was also possible to see drafts of such plans.

“The overall guiding principle and approach to gender is that men and women should have equal rights, equal access to resources and equal influence... The majority of the farmers are females and the majority of agricultural output is produced by women, yet most Government interventions in agriculture have targeted men. The water for production strategy will address the needs of the majority of farmers, these being women. ...ensuring that all intervention programmes are gender-focused and gender-responsive, the water for production strategy will acknowledge structural gender inequalities by supporting vulnerable groups such as female subsistence farmers” (Ministry of Water, Lands & Environment, 2003).

Allocation of financial resources

The work plan from the Rural Water Department also reflects how gender mainstreaming as a concept has been translated into planning for rural water development. In 2004, a plan was made for the implementation of software activities. The 2004 plan was able to allocate 12 per cent of the total budget to software activities, which had formerly been done only in an ad hoc manner. “The sector guidelines for 2005/6 also specify that up to 12 per cent of the total water sector conditional grants can be spent on software steps ...” (Ministry of Water, Lands & Environment, 2004). These steps include activities related to advocacy, meetings, and trainings at every stage of the technical work to be done.

The Senior Water Officer in Charge of Management Information Systems at the DWD noted that, “There is now funding for community mobilization. It has risen from 3 to 12 per cent. The funding for districts can be used for software activities, and gender falls there.” This addresses gender concerns adequately, because women within the communities will be trained together with men through such initiatives. It is hoped that government will continue to increase funding to these and other “software” activities as the need arises and that budgets are consciously allocated

to gender mainstreaming and not just by proxy. Although the interviews revealed evidence of some training in the communities which had been carried out, it was impossible to validate such claims at the DWD. Further validation of the practicability of the initiative needs to be done. This is an area recommended for future research.

Monitoring

Prior to the Strategy, the DWD used eight indicators to measure performance in the water sector. Since the implementation of the Strategy, they have added an indicator to the 2004 work plan which measures the “percentage of water and sanitation committees in which at least one woman holds a key position (chairperson, vice chairperson, treasurer or secretary).” The Directorate is using this indicator to measure changes in the gendered levels of participation in maintenance of water sources.

The personnel interviewed were also aware of the mandatory need for 50 per cent representation on water and sanitation committees at the village level. Using gender-sensitive indicators is a best practice that can be replicated by others who may have difficulties in measuring how effective their gender activities are. It also forces the implementers to measure the gender impact of their activities, because it is directly incorporated into the reporting format. If the levels are not achieved, they are then required to address this challenge explicitly in their next year’s work plan and targets.

Lessons learned

While it is too soon to measure the Strategy’s impact at the community level, given its explicit empowerment objectives it is anticipated that it will:

- Encourage women to take up leadership positions in their communities;
- Encourage men to participate in activities related to water, which has been for long considered a woman’s domain; and
- Help to demystify stereotypes of gender roles.

Already there are water committees set up and the women have taken up leadership positions in these committees, according to respondents interviewed.

The Water Sector Gender Strategy sets a good example of how gender can be strategically mainstreamed into policy and plans at the national level and linked directly with work plans and activities at the decentralized district level. The DWD has developed indicators for monitoring the success of the strategy and plans to continuously review it to avoid any loopholes. The Strategy also encourages collaboration between Ministries and like-minded organizations to mainstream gender into the water sector. This, in turn, has helped the Directorate coordinate and develop a sustainable gender-integrated approach to water-related development activities throughout the country. The development of a national water and gender strategy has also dispelled the misconception that gender mainstreaming only occurs due to donor conditionalities and agendas.

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15. INDIA: Evolution of Gender Mainstreaming in the Human Resource Policy of Bharatiya Agro Industries Foundation (BAIF) in Pune

By Sangangouda (Sandeep) D. Naik

Mr. Naik has a Master's degree in Social Work from Karnataka University in India. He has worked for the BAIF Development Research Foundation since 1998 in diverse capacities, ranging from development and appraisal of project proposals to monitoring, control, evaluation and related training. His work with BAIF's Swayamsiddha programme focuses on women's health and empowerment, capacity building and network building. He has also worked as a capacity building officer for the Snehadeep Jankalyan Foundation and as a development promoter for the CASP-PLAN (Community Aid and Sponsorship Programme) project. His social work experience includes raising funds for the National Federation of the Blind. Previous research work involved a study on the improvement of the neem tree and its potential benefits to poor farmers in developing countries and case studies on common property resources managed by people's institutions in Rajasthan. His training experience includes: promotion and management of Self-Help Groups; and raising gender and environmental awareness in agriculture.

Case study methodology: Harvard

Gender Analysis Tools: Practical needs & strategic interests, empowerment framework

Problem statement

The case study looks at the changing understanding, acceptance and implementation of gender mainstreaming in BAIF Development Research Foundation's Human Resources Department (HRD) in Pune (Maharashtra State) in India. BAIF, which had been operating with traditional human resources policies, consciously decided in 2002 to make a strategic change in its human resources policy and initiate a gender-mainstreaming process. The challenge was how to actually implement the new gender mainstreaming policy. The actions that BAIF took to do so include a process to sensitize project office staff and the participants and stakeholders in their programmes. Hence this case study analyzes what has been the impact of this policy change over the past three to four years both within the organization and in its field programmes.

Methodology

The Harvard approach in this case entails an examination of the following components before, during and after BAIF's introduction of a gender mainstreaming policy:

- BAIF's policy framework with its vision, mission and strategic plans;
- Acceptance of the policies by the employees;
- Benefits derived by the employees;
- Organizational ability to carry out new mandates;
- Employee satisfaction; and
- Context analysis in terms of policy impetus, barriers and impact.

Specific areas of data collection and analysis focused on the:

- Evolution of BAIF's gender mainstreaming policies;

- Implementation patterns of the new policies;
- Outcomes of these policies;
- Staff members reactions to the policies;
- Staff attitudinal changes;
- Staff understanding of gender issues;
- Policy impact on personnel;
- Changes in the work environment; and
- Impact of gender policies on field programmes.

To obtain this information the researcher interviewed BAIF employees at two branches, the Head office at Pune and at the Ghatol cluster in the Banswada district, Rajasthan state. He used an open-ended interview process. At the BAIF headquarters he interviewed the HRD manager, non/technical and support staff members, and the President of the organization. He also reviewed relevant institutional documents such as BAIF's past and current HRD manuals, the minutes and records of HRD meetings and feedback reports from the other field offices. The researcher also conducted an analysis of the impact of the new gender mainstreaming policies in the water and sanitation programmes at the village level, drawing upon the experience of two villages from BAIF's watershed programme as a representative sample. This involved interviewing beneficiaries from the safe drinking water projects in Ghatol at Rajasthan, and Vandsa in Gujarat.

Background information

BAIF Development Research Foundation is a voluntary organization established by a disciple of Mahatma Gandhi, the late Dr. Manibhai Desai of Urlikanchan near Pune. BAIF has implemented multidisciplinary rural development programmes throughout the 11 states of India for the last three decades. Its basic programme objectives are to provide gainful self-employment and sustainable livelihoods to the rural and tribal poor. The organization has a strong in-house research base and over the last few years has been able to consolidate its on-going programmes through the use of improved technology and more efficient systems, including the integration of gender equality measures. BAIF programmes have ranged from dairy cattle management, watershed management, community health, rehabilitation, agricultural extension, agro-forestry and conservation of natural resources.

BAIF's water and sanitation programmes in all states focus on two aspects: water conservation and safe drinking water for all. Conservation of water through construction of check dams, percolation tanks, recharged wells and farm ponds as well as repair of existing check dams using the sandbag technology has transformed the lives of villagers. Drinking water is now accessible to all the families in the villages where the programme has been implemented.

Best practices

BAIF's field-focused gender policies

BAIF's gender development policy is one of several that cut across all its development programmes. From a programme perspective its main focus is to reduce drudgery by introducing appropriate technology, and sensitizing the community about the significant role and contributions of women to the community.

BAIF has realized the important role of Self Help Groups in improving community access to water and sanitation and the need to involve women integrally in this process. To this end, their programme encourages women's groups to initiate various community development activities and

gives them an opportunity to display their latent talents. To do this, BAIF feels that it is necessary to empower local women. Consequently, an important programme goal for them is to ensure that women are able to address their own needs. To help achieve this goal, BAIF has instituted a policy in the field project areas: women must be a part of the decision-making process regarding water source management within any community organizations formed as a part of its water and sanitation programmes.

The policy shift to integrate gender mainstreaming in the project offices and the field areas started simultaneously. This was mainly initiated to highlight BAIF's commitment to increased gender equality at the Human Resources Department and programme levels. In the field a beginning was made in the 1980s through the promotion of Self Help Group programmes. This has now been augmented by programmes to build women's capacity in decision-making, their participation in programme planning, implementation, monitoring and evaluation.

BAIF's staff-focused gender and HR policies

BAIF recognizes gender inequality as a major development problem and is committed to empowering women through integrating gender-responsive initiatives in all its programmes. The organization notes that women form the core of the average Indian family, particularly in rural India and have considerable responsibility within the household. BAIF has also observed that women's situation has not changed substantially despite the economic development taking place around them. For this reason, BAIF's policy at the field level is to ensure that all of its development activities are gender-sensitive at the planning and implementation levels. It has made an effort to address and recognize women's concerns and contributions so that the benefits of development reach them adequately.

Evolution of policy on gender mainstreaming

Prior to 2002, BAIF had only one gender-based policy – a 60-day maternity leave for both birth and adoptive mothers. Apart from this there were no other gender-based benefits (BAIF, 2004).

The evolution of HRD policies in the last few years and a gradual change in how the organization looked at equity issues led to the gender mainstreaming policy's evolution and formulation. While many of the related policies came into effect in 2002, the Gender Policy as a whole was officially adopted in April 2004 (BAIF, 2004) and a committee was formed to tackle different issues related to the new policy. Its impact over the last three to four years has been visible.

BAIF employees are now deriving benefits from the following key policies:

- Both male and female employees who have put in a continuous service of two years shall be entitled to adoption leave of 15 & 60 days respectively (as of April 2004);
- Employees who already have two children will not be entitled to adoption leave;
- Employees can claim adoption leave only once during their service period;
- Male employees who have put in a continuous service of one year shall be entitled to paternity leave of two weeks for the birth of a child (as of April 2004); and
- Male employees can claim paternity leave only once during their service period (BAIF, 2004).

As a part of its new gender policy BAIF has also:

- Established a grievance process to address issues related to sexual harassment, misconduct and misbehaviour between men and women;

- Integrated gender sensitivity into their induction course for new employees;
- Instructed the Management Development Programmes (MDP) to focus on the gender mainstreaming process and provide a platform for gender sensitization among the trustees and BAIF employees (Annual Report ,2003); and
- Organized gender sensitization training for programme stakeholders.

Policy procedures

BAIF has established policy procedures, including committees drawn from all staff levels, to facilitate the implementation and administration of its gender policy. These include a Complaints Committee which must be headed by a woman, with equal male and female membership drawn from different departments as well as, if possible, a third party representative from an NGO, conversant with sexual harassment.

This set of questions helped both the researcher and BAIF staff to reflect upon and examine the policy process from its starting point as outlined below:

Input – policy introduction → Process – adoption & implementation → Impact

The questions also assisted in covering all factors responsible for the initiation of this best practice, the problems and obstacles faced, the strategies BAIF used for problem solving and the basic changes and impacts that have occurred as a result of the best practice.

Discussion of the new paternity leave policy, for example, allowed staff to reflect upon the rationale for such a policy initiative, the process used to introduce this initiative, the immediate staff reactions to it, organizational commitment to the new policy and its adoption and use by staff members. It also helped determine the policy’s impact in terms of gender sensitivity, increased recognition of men’s emotional needs and family responsibilities and the changes in the attitudes of male staff members. Staff were also able to provide feedback that this new practice is successful and sustainable enough and could be replicated in other parts of the organization.

The key impacts staff raised in this discussion included the following:

Practical needs at employee level:

- Creation of a paternity and adoption leave system;
- Increased availability of paid time by mothers for baby care and feeding;
- Increased recognition of paternal responsibilities and men’s family needs; and
- Increased access to spouse support following the birth or adoption of a child.

Strategic interests at employee level:

- Increased gender sensitization among staff related to evolving gender policy and gender-integrated programmes;
- Atmosphere created that supports freedom of expression for women; and
- Freer environment for women to participate in organization level decision-making.

Summary Table of Gender Policy Impact at Employee Level

Situation Before Gender Policy Implementation	Situation After Gender Policy Implementation
<i>Staff Involvement in Decision-making</i> Formerly only 2 per cent of women staff involved in decision-making bodies	<ul style="list-style-type: none"> • 11 per cent of women staff now involved in decision-making bodies
<i>Changing Roles</i> Almost no women involved in field offices or field office management; no women on the Board of Trustees	<ul style="list-style-type: none"> • 6 to 7 per cent of field office employees are women and 4 per cent (2500+ employees) work at the management level • Board of Trustees – two women members have joined in the last three years • Executive Committee of BAIF now has one woman member
<i>Work Atmosphere</i>	<ul style="list-style-type: none"> • Women feel more confident • Support systems established
<i>Freedom of Expression</i>	<ul style="list-style-type: none"> • Increase in male and female staff sense that they can discuss staff issues and grievances
<i>Work/Family Balance</i>	<ul style="list-style-type: none"> • Increased recognition of importance of work/family life balance, e.g. women staff allowed to nurse babies at work or to take breastfeeding breaks to go home to nurse; men allowed to take paternity leave
<i>Comfort Level for Men</i>	<ul style="list-style-type: none"> • Due to better understanding of gender-related problems for both women and men, the men feel better and feel that they have more space for themselves and for women in the office
<i>Understanding Women's Needs</i>	<ul style="list-style-type: none"> • Women and men are working together more cooperatively and feel more at ease with each other – bringing about better results in their work
<i>Delegation of Authority</i>	<ul style="list-style-type: none"> • At programme and implementation level, the roles have changed and the BAIF field staff have been acting as facilitators to the whole process
<i>Women's Participation</i>	<ul style="list-style-type: none"> • Increase in women's participation in programmes in terms of project designing, planning, monitoring and evaluation
<i>Gender Sensitization</i>	<ul style="list-style-type: none"> • Integration of gender sensitization training is the norm for new employee induction training, in Management Development Programmes and at the field level

Policy impact at the community level

Assessment of practical needs and strategic interests

During field interviews in the two communities concerned, when asked about project benefits, community members talked about the installation of non-reversible pumps, which ensure that the water goes to various locations in the village and reduces the distance to the water source, which saves women's time. They also spoke about the Village Cleaning Drive, which uses Self Help Groups as a key strategy to involve and mobilize people, and the impact of other programmes such as low-cost toilets, water quality testing, well chlorination, and health camps.

Based on these field discussions the researcher was able to ascertain that BAIF's gender mainstreaming policy had the following impacts:

Practical needs at the field level:

- Installation of women-friendly equipment for agricultural operations;
- Increased access to a dependable source of clean water through installation of non-reversible hand pumps circulating water in all the required areas; and
- Installation of “ball bearing in the hand (flour) mills” which are easy for women to operate.

Strategic interests at the field level:

- Participation of women in village meetings for local governance and influencing policy-making in water and sanitation;
- Adoption of community needs assessment process that focuses on women’s water and sanitation and health needs as a major input for policy decisions at the local level;
- Initiation of use of sex-disaggregated data and indicators in BAIF’s monitoring and evaluation processes; and
- Introduction of groups responsible for cross-cutting issues to ensure there is more effective programming to address gender needs (members are mostly technocrats who work with the gender cell).

Lessons learned

BAIF’s commitment

During the period of the case study research, BAIF underwent a serious reflection process about the organization’s commitment to its gender mainstreaming policies in the long run (Fact Sheets, 9/2004). In the process BAIF has learned that gender mainstreaming is not just about meeting women’s needs more effectively, but also about gaining greater understanding of the ways women and men can work together to the benefit of both sexes. In the process, the organization has discovered that supporting increased empowerment of women at the field and employee levels is of critical importance to programme success. BAIF has observed that its new gender mainstreaming policies are making a positive difference in the lives of both its male and female employees, as well as having a significant impact on women’s empowerment at the community level.

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